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**Peer Tutoring and Learning Experiences of
Students with Specific Learning Difficulties:
A Case Study of Middle Schools in Saudi
Arabia**

by

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List of Abbreviations

PT	Peer Tutoring
RPT	Reciprocal Peer Tutoring
UPT	Unidirectional Peer Tutoring
CAPT	Cross-age Peer Tutoring
CWPT	Class-wide Peer Tutoring
SEN	Special Educational Needs
LD	Learning Difficulties
SpLD	Specific Learning Difficulties
GASE	The General Administration of Special Education
RSEIP	The Regulations of Special Education Institutes and Programmes
GSpLD	The Guide to Specific Learning Difficulties Programs in Middle and High School Stages
IEPs	Individual Educational Plans
MoE	The Ministry of Education
AT	Activity Theory
CoP	Community of practice
TAs	Teaching assistants

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Declaration

I declare that, apart from work whose authors are explicitly acknowledged, this thesis and the materials contained in this thesis represent the author's own original work. I confirm that this thesis has not been submitted for a degree at any other university.

Parts of this study have been presented on several occasions, including:

1. New Challenges in Education: Doctoral Research Conference (2017), University of Birmingham, UK.
2. Education in Unequal Societies: The Centre for Education Studies 6th Annual Interdisciplinary Postgraduate Conference (2018), University of Warwick, UK.
3. Law, Business, Education and Social Sciences (LBESS): International Conference (2018), London, UK.

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1. Almulla, A. (2018). Teachers' and students' perceptions of the academic and socio-emotional benefits of peer tutoring. *Journal of Advances in Humanities and Social Sciences*, 4(1), 1-12.

Abstract

This study aims to explore how peer tutoring (PT) is perceived and practiced within the religious-cultural context of Saudi Arabia and to examine the perceptions of teachers, students and supervisors regarding the efficacy of PT in supporting the learning experiences of students with specific learning difficulties (SpLD). It also seeks to understand how factors such as physical environment, resources, planning, training provision, supervision and collaboration between professionals can facilitate or hinder the development and even implementation of PT. Perspectives and practices on PT in Saudi Arabia were explored in the context of six inclusive middle schools, focusing on students that had been assessed as having SpLD. This study adopted a qualitative case study approach, conducting data collection via semi-structured interviews, semi-structured observations and document analysis. The findings were analysed through an activity theory (AT) perspective, specific components of which informed the examination of the activity system of PT within the field of special and inclusive education, as well as the perceptions of special needs education supervisors and teachers, and of students with and without SpLD, regarding this classroom methodology. The findings illustrated that the theory and practice of PT in Saudi Arabia were primarily shaped by important cultural traditions and Islamic principles, especially those that pertain to the notions of normality and weaknesses. Saudi SEN teachers had predominantly adopted a unidirectional approach to PT, based upon asymmetric relationships between students, in which peer tutors functioned as ‘transmitters of knowledge’. Despite the benefits that PT offered to SpLD students, optimising the implementation of PT requires several major obstacles to be tackled. These include the need for more effective planning, clear written guidelines to outline the expectations of peer tutors, a more structured and consistent approach among schools, and the design of a system that fosters better collaboration between mainstream teachers, SEN teachers and SEN supervisors.

Chapter One Introduction

1.1 Introduction

Education is a complex, dynamic and continually evolving system that seeks to meet the changing needs of all students. Many educators are currently working to establish a more inclusive, cooperative approach, with learners working together rather than in isolation (Odluyurt, Tekin-iftar and Ersoy, 2014). However, teaching learners of different abilities can be problematic, unless the approach is adapted to better suit their diverse needs. This has led to the design and adoption of alternative teaching and learning techniques, such as peer tutoring (PT). PT is a cooperative learning system in which two students work together through an established framework for interactions towards a mutual goal (Duran, 2010).

The effectiveness of PT in meeting the needs of classrooms of diverse learners and improving the social and academic performance of students with special educational needs (SEN) has been studied in a number of Western countries, including the UK and the USA (e.g. Murphy, Faulkner and Farley, 2014; Sanderson et al., 2013; Topping, 2005; Merrett and Thorpe, 1996). The majority of these studies have focused on assessment of the impact of PT on students' attainment (e.g. Grünke et al., 2017; Lundblom and Woods, 2012; Hughes and Fredrick, 2006), with very limited investigation of attitudes and perceptions (e.g. Thompson, 2011; Lockspeiser et al., 2008). It may be difficult to improve the implementation and understanding of this classroom approach without further study, however. Furthermore, the majority of research on PT efficacy with SEN students has mainly focused on primary schools (e.g. Bowman-Perrott et al., 2016; Kamps et al., 2008), and has neglected students with SpLD. Although PT has been widely studied in the

context of certain high profile Special Educational Needs (SEN), including autism (e.g. McCurdy and Cole, 2014; Ward and Ayvazo, 2006) and attention deficit hyperactivity disorder (e.g. Vilaro et al., 2013; Plumer and Stoner, 2005), very few studies have examined it with SpLD students.

The current study examines the use of PT in Saudi Arabia. The Saudi General Administration of Special Education (GASE) has explicitly recognised the value of expanding provision for SEN services from primary to include middle and high school students with SpLD. The aims of the GASE have been recently stated as follows (The Ministry of Education (MoE), 2011a):

1. Ensure support for SpLD students throughout all stages of their education, with provision of SEN services from primary to the end of high school;
2. Reduce academic failure among students in middle and high school, thereby improving student performance and retention;
3. Enable SpLD students to contribute effectively to society; and
4. Minimise the negative repercussions of the repeated failure of students with SpLD.

This commitment has required SEN supervisors and educators in Saudi Arabia to realise that the structure of the school day can be dramatically different at each stage of school life. Unlike in primary school, teaching SEN students in mainstream classrooms in middle or high school requires a variety of classes, with many different teachers, making it challenging to provide the individualised support to meet student needs. In addition to the inherent logistical complexity of this arrangement, many SEN teachers may lack the subject specific knowledge required at middle and high school stages. These challenges have led to a number of teaching strategies being proposed for

SEN teachers working with SpLD students (MoE, 2011a), one of which is PT (Bond and Castagner, 2006).

A number of factors may facilitate or hinder the implementation of PT, including access to sufficient training (Cervantes et al., 2013; Holecek, 2012), the physical environment and resources (Carter et al., 2013; Topping, 2005); and collaboration between the professionals involved (Carter et al., 2015; Thompson, 2011). Furthermore, many Saudi teachers utilise teacher-centered, lecturing approaches (Almulla, 2014; Alhaidari, 2006), which limit opportunities for students to collaborate in the classroom. This culture of teaching in Saudi Arabia is influenced by the religion and traditions, potentially creating additional challenges to the implementation of PT. Nevertheless, there has been recognition of the need to move away from direct instruction to embrace alternative educational practices, such as cooperative learning (Alhadi, 2013; Alakili, 2011). This can be achieved by raising teacher awareness regarding the benefits of implementing more collaborative approaches that activate the role of students in the classroom. Nevertheless, there are certain challenges inherent in the Saudi Arabian context, such as the lack of training courses for implementing new methodologies, scheduling difficulties in attending workshops, and workload that can limit opportunities to learn or use new strategies (Alaqeel, 2013; Algarfi, 2005).

1.2 Research Aim and Questions

This research aims to investigate how PT is understood and practiced within the Saudi education system. The main objectives linked to this aim are to examine the perceptions of participants regarding the implementation of PT in the specific cultural and religious context of Saudi Arabia, to identify the key factors that affect the implementation of PT practices, to explore the

perceptions of both teachers and students regarding the efficacy of PT in supporting the learning experiences among SpLD students.

The specific research questions generated by the aims are:

1. How is PT perceived and used to support students with SpLD within the cultural and religious framework of Saudi Arabian middle schools?
2. What are the perceptions of teachers, students and supervisors of the effectiveness of PT, in terms of enhancing the learning experiences of students with SpLD?
3. What are the perceptions of teachers, students and supervisors regarding the factors that facilitate or hinder the implementation of PT for students with SpLD?

1.3 Research Gaps and Significance of the Study

This topic has been chosen for a number of reasons. The study may offer insights into the viability of PT for teachers who are familiar with traditional teaching methods, and its impact on the planning of classroom practice. This topic is also valuable from an academic perspective, as the literature on using PT to support SEN students in Saudi Arabia is limited. Most studies are Master's dissertations, utilising quantitative methodologies (e.g. Albajhan, 2008; Alharthy, 2007), informing the type and depth of analysis available. This is particularly evident in the study of middle school students with SEN, despite the fact that this area is extremely topical in Saudi Arabia, given the recent government expansion of SEN provisions.

To the best knowledge of the researcher, the current study constitutes the first investigation of the perceptions of PT with SpLD students in Saudi middle schools. The findings of the present study, and especially the factors affecting

teachers' implementation of this method, could therefore contribute to the development and enrichment of PT training programmes. As all schools in Saudi Arabia follow centralised systems and processes in terms of assessment, curriculum and teacher training, the results of the present study may have far-reaching effects (Alnaji, 2014; Alhogail, 2011). Finally, this study is intrinsically related to the researcher's job as a lecturer and student-teacher supervisor at a Saudi university. The outcomes of this study will provide insights into the opinions of teachers and students regarding the use of PT at middle schools and the extent to which this approach can affect teaching and learning. Importantly, the findings may inform future decisions on whether student-teachers should study the implementation of this method during their initial teacher training and in what way.

Additionally, a number of gaps have been identified in the literature. Despite the wealth of literature on PT, as will be evident in the literature chapter, the majority of studies in this area have focused on the outcomes of PT, concentrating on examining the effect on SEN student attainment via experimental and quantitative designs. In contrast, very few studies have investigated the perceptions and experiences of stakeholders or considered the use of PT to support SpLD students. This is also the case in the context of Saudi Arabia, where few, if any, studies have examined the implementation and the perceived effectiveness of PT, particularly with SpLD students. Additionally, while the MoE has attempted to improve the education provided to students with SEN, associated decisions do not seem to have been informed by their own preferences or insights, especially regarding classroom strategies and approaches to teaching and learning. This may be because Islamic societies typically expect parents to represent their children, the natural consequence of which is that the perceptions and experiences of students with SEN tend to be neglected. Lack of studies on children's voices and perceptions may be exacerbated by most Saudi studies being positivist in

nature, often utilising quantitative research approaches, due to the perception that they are more reliable and scientific. The lack of interpretative qualitative research designs affects the understanding and implementation of PT, which is an intimate and contextual technique by its nature requiring an understanding of the dynamics and relationships between teachers and students in schools.

In response, this study seeks to contribute to both the knowledge and practice of PT, in the following ways:

- a) Outline the translation and practice of PT policy in the specific religious-cultural context of Saudi Arabia, from the perspectives of stakeholders (teachers, supervisors and students). The role played by students is instrumental in the success of inclusive schools, so their perspectives are especially valuable. Students can help to improve self-esteem, behaviour, and communication skills (Rose, 1998), as well as the wider school ethos (Quicke, 2003).
- b) Explore perspectives of students, teachers and supervisors regarding the effectiveness of PT in supporting students with SpLD.
- c) Highlight factors that appear to influence PT, such as training, collaboration between professionals, planning, supervision, and resources. These issues may provide valuable insights for the implementation of PT, particularly at a policy or administrative level.
- d) Provide a qualitative perspective as a response to the predominant quantitative approach used in this topic by using activity theory (AT) to include the perspectives of the participants and, where appropriate, the perspective of the researcher.
- e) Provide an example of triangulation to corroborate research data, through the use of semi-structured interviews, observations, and document analysis.

1.4 Overview of Chapters

This chapter has provided an introduction to this study, providing its background context, outlining the research questions and discussing their importance in terms of delineating the research gap.

Chapter 2 is the literature review. It examines relevant dimensions of educational theories and policies under three main headings: teaching and learning within the religious-cultural framework of Saudi Arabia; an overview of SEN policy within the cultural and religious context of Saudi Arabia; and PT policy within the cultural and religious context of Saudi Arabia. A discussion is also provided of the types of PT and the theoretical perspectives on this approach (cognitive development theory and the social constructivism theory), as well as the effectiveness of PT and the factors affecting its implementation. The literature review concludes by summarising key research gaps.

Chapter 3 outlines the research methodology, beginning with AT, the theoretical framework for the research. Presentation of this underlying framework is followed by a critical evaluation of its use in the current study, highlighting its relevance to the investigation of PT. Justification is offered for the chosen research paradigm, research design and analysis, and the sample selection method. Ethical considerations, translation issues, the trustworthiness of the research procedures and findings, and the positionality of the researcher are also discussed in this chapter.

Chapter 4 presents the thematic analysis of the study results through the conceptual lens identified in the literature review and the AT framework, as well as concepts that emerged during the analysis. The salient findings related to each of the main participant groups involved in PT are then reported under the appropriate dimensions.

Chapter 5 provides a discussion of the findings presented in the previous chapter, with key themes and issues analysed in context of the research questions. These issues include the nature and scope of student interactions, pedagogy and type of PT, the profile of tutors and tutees, the gains and losses of PT and challenges to the implementation of PT.

Chapter 6 concludes the study, summarising the main findings of the investigation and outlining its potential contribution to the specific Saudi context and the wider SEN literature. Finally, the chapter outlines the strengths, limitations and implications of the study, as well as viable avenues for future research.

Chapter Two Literature Review

2.1 Introduction

Given the relative newness of PT in Saudi Arabia and the highly influential religious-cultural framework that underpins education in the kingdom, this chapter seeks to provide a cogent discussion on the nature of teaching and learning within the religious-cultural framework of this specific context. This framework consists of Arabic Islamic values and traditional collective culture, as well as the dominant role of parents and teachers in this specific context. The chapter then focuses on the concept of PT, examining the main types and the key theories that underpin this pedagogical approach, before transitioning into policies of PT and SEN. The discussion is centred on two of the most prominent PT aspects regarding its academic and socio-emotional effectiveness. The discussion then moves onto the factors thought to shape PT, such as training, planning, supervision, resources, collaboration between professionals, and the physical environment. Finally, the conclusion of this chapter summarises the key findings arising from the literature review, drawing together those most pertinent to the current study and highlighting the gaps that have been identified.

2.2 Teaching and Learning within the Religious-Cultural Framework of Saudi Arabia

There is extensive evidence, such as the findings of the Teaching and Learning International Survey, to show that teaching beliefs and learning practices are culture-specific and therefore differ between countries (OECD, 2009). Teaching and learning practices are potentially shaped by factors related to the context of the country in which they occur, including religious values, cultural traditions and educational policies. Therefore, this section

examines how teaching and learning practices, as well as the concept of knowledge, have been shaped by the religious-cultural framework of Saudi Arabia, and how this affects the implementation of PT.

This study analysed the education system of Saudi Arabian through the lens of the theory of practice developed by Bourdieu (1990), which examines the interaction between three main concepts: doxa, which describes the core beliefs influencing thoughts and actions; habitus, which describes the dispositions of individuals, which are shaped by their life experiences and through the process of socialisation; and field, which describes the social and institutional arenas in which people act and compete (Bourdieu, 1990). This study attempts to use these western concepts critically and reflectively, rather than following them blindly. It is not the aim of this study to apply the ideas of Bourdieu's theory to the Saudi context, or to examine Saudi Arabia through the lens of this theory, but rather to use the theory as a tool to better understand the Saudi education system and the culture of teaching and learning, enabling more accurate interpretation of participants' perspectives and implementation of PT.

The concept of doxa illustrates the common beliefs that are held by a group of people in a particular society (Crowley and Hawhee, 1999), such as the western cultural doxa of brides wearing white dresses. According to Bourdieu (2000, p. 16), doxa is "a set of fundamental beliefs which does not even need to be asserted in the form of an explicit, self-conscious dogma". Unlike opinions, which can be easily discussed, refuted and justified, doxa are unquestioned assumptions that are commonly taken for granted. Doxa can transcend the common beliefs of a certain society, potentially forming the social practices and behaviours of groups who share the same values (Bourdieu, 1990). Clearly, all cultures have their own belief systems, with their own ways of framing values and beliefs. In Saudi Arabia, Islamic principles not only affect the thoughts and actions of individuals, but also

shape the education system of the country. Saudi Arabia is an Islamic nation, governed under Sharia law, with the corresponding rights for all individuals, such as the right to dignity, life, and education. Therefore, the national education system aims to foster and disseminate understanding of Islam, including associated knowledge, skills, values and ideas (UNESCO-IBE, 2011). A number of Islamic scholars have claimed that education in Islam is highly reliant on the role of teachers in conveying religious knowledge to their students. For example, Al-Qabisi (1986) asserted that the main aim of teaching young boys is to understand the Islamic religion and its principles, and it is therefore the responsibility of teachers to train their students on how to read, write and, most importantly, to memorise the Qur'an. In addition to supporting traditional teaching approaches, he argues that memorising Qur'an by heart is more important than studying other subjects, such as mathematics, language science and poetry, as these are considered optional and of secondary importance. Nonetheless, it can be argued that the priority given to teaching the Qur'an may be attributable to the dominance of *Alkatatib* (traditional Qura'nic schools) during the fourth century AH. From this perspective, the focus on traditional teaching approaches can be justified by the nature of Qur'an, which requires a strong ability to memorise and recite (Waswas and Aljawarneh, 2014). Additionally, Al-Attas (1980, p. 7), whose theory of education in Islam has been shaped the writings of many Islamic educators (e.g. Hashim and Rossidy, 2000; Hussain, 2004), defines knowledge in Islam as "the arrival in the soul of the meaning of a thing, or the arrival of the soul at the meaning of a thing. The 'meaning of a thing' means the right meaning of it". Al-Attas (1980) explains that 'right' reflects the perception of reality in Islam, which is intrinsically shaped by the belief that all knowledge is divine in origin and therefore immutable. Al-Attas (1980) defined the content of education as "recognition and acknowledgement of the proper places of things in the order of creation, such that it leads to the recognition and acknowledgement of the proper place of

God in the order of being and existence” (p. 11), thereby emphasising that the acquisition of knowledge in Islam should foster closeness with the Creator, more than enable the fulfilment of earthly objectives. Yet, his theory of education in Islam is based on *Adab* which is “a set of coercive moral practices and training” and lacks the actual meaning of education in Islam (Sahin, 2018).

Education in Islam is directly linked to the Arabic word, *Tarbiyah*, which refers to a range of practices, such as teaching, upbringing, nourishing, care and guidance (Sahin, 2018, 2013). *Tarbiyah* seeks to nourish the spiritual, moral or religious lives of Muslims, as well as to support them physically, mentally, economically and socially (Mahmoud, 2000). In Islam, one of the main characteristics of *Tarbiyah* is the balance between the work for this world and for the hereafter, and the balance between the benefit of the individual and his/her society (Abdulrauf, 1994). Therefore, Muslims are encouraged to reconstruct the earth, earn a living, spread education and cooperate for the promotion of Islam, as well as to ensure happiness in this world and the hereafter (Al-Sawi, 1999). Muslims are also encouraged to seek knowledge everywhere, at any time, even if this knowledge can be found beyond religious studies or from non-Muslims scholars, as long as the knowledge does not conflict with Islamic principles. For example, Al-Zarnuji (1981) in his famous book on the implementation of Islamic theory in education, *Ta’lim Almota’lim Tariq Altaa’llum*, argues that Muslims need to study medicine, in order to treat one another. This movement for educational change can be traced back to Al-Kanadi in the third century AH, who pioneered an attitude of openness by encouraging learners to study and reflect on western civilizations by translating the works of Greek philosophers, such as Aristotle and Plato and providing simplified explanations of their works for learners (Harbi, 2003).

Islam has a number of approaches for *Tarbiyah*, such as stories, experiments and critical dialogue, most of which can be deduced from the Qur'an (Sahin, 2013; Al-Aqeel, 2009; Ali, 1999). According to this concept, the pursuit of knowledge in Islam should not rely exclusively on the role of teachers in transmitting information to students, as Muslims are required to actively think, search and experiment by using their brain and senses to reach the truth using supporting evidence (Al-Sawi, 1999). The importance of being an active learner is supported by a number of Islamic scholars. For instance, while Ibn Hazm Al-Dhaheri emphasised that Muslims should be open to the scientific output of others, they have to use their minds and should only accept ideas that are supported with evidence (Aql, 2015). Ibn Khaldun (1992) in his famous book, *Al- Muqaddimah*, argued against focusing on indoctrination and memorisation, because he believed that *Aql* (mind) is the source of knowledge and that people should gain information through life experience and personal contemplation. Indeed, Islam rejects blind imitation, prohibiting Muslims from follow the thoughts and behaviours of other nations without questioning their validity. For instance, in Surah AL-Baqarah, Allah denies the polytheists who followed the religion of their fathers without thought, saying "And when it is said to them 'Follow what Allah has revealed,' they say, 'Rather, we will follow that which we found our fathers doing.' Even though their fathers understood nothing, nor were they guided?" (2:170).

Although the pursuit of knowledge is a key Islamic principle, in practical terms, teachers in Saudi Arabia have long been seen as being the sole educational authority and so are highly valued, respected and even seen as prophets. Doxa in Saudi Arabia seems to hinder the shift from teacher-centred to student-centred approaches, because of the belief that teachers are the best source of information. This belief has been largely shaped by the religious culture of the kingdom. Traditional Qur'an schools in Saudi Arabia, which focus on learning through memorisation, recitation and repetition (Alenizi,

2012; Hamdan, 2005), continue to dominate educational services and shape contemporary classroom practice in the public education system (Alsayegh, 2014). Teaching practices in many Saudi schools remain influenced by the notion of banking education developed by Freire (1970), in which information is transmitted from the educator to the students (Hamdan, 2014). These practices place the onus on teachers to transmit correct meanings to students, instead of creating opportunities for learners to search for answers, whether individually or in conjunction with their peers. These practices hinder opportunities for students to discuss, question and work actively in the classrooms, thereby creating important challenges for SEN teachers, such as the limits caused by not diversifying teaching to meet individual student needs or the minimal focus on learner-centred approaches that might be more suitable for learners with SEN.

Another integral part of doxa in Saudi society is the influence of traditional collective culture, which emphasises the importance family-oriented behaviours and the dominance of parents, especially fathers, despite the cultural pressure from globalisation which stresses more individualized behaviours, with less control from family leaders (Al rubiyea, 2010; Patai, 2002). The family group in Arab society stresses conformity among group members, exchanging support for conformity with the norms of the group (Patai, 2002). The survival and success of a family group is dependent on its public image, so values stability and compliance with valued norms, like honour and the authority of senior men, potentially prejudicing individuals who think differently from the family group, who must often sacrifice individuality for social status and acceptance (Alanazi, 2012). This is also true of individuals with disabilities, who are often perceived as unable to serve their families and as deviating from desired standards of normality. This negative perception can also affect PT, with students being perceived as

unable to assist their peers in activities, or having weaker relationships with typically developing peers due to the impact of negative attitudes.

Habitus has been widely discussed in relation to the process of socialisation (Navarro, 2006; Wacquant 2005; Bourdieu, 1984). It describes the dispositions, perceptions and actions generated by socialisation (Navarro, 2006) and the way that individuals or groups adjust and flourish through internal representation of external structures (Hodkinson, Biesta and James, 2008). Habitus also describes interactions between social structures and the individuals who inhabit them, reflecting the past, informing perceptions of the current and shaping possible futures (Bourdieu, 1984). As it is a product of social rather than individual practices, habitus is not permanent or fixed, instead varying over time and within different places. Navarro (2006, p. 16) supports this position, explaining that habitus:

Is not a 'structure' but a durable set of dispositions that are formed, stored, recorded and exert influence to mould forms of human behaviour. It may vary in accordance to the social environment... It does reinforce cohesion but also stimulates change and innovation, especially when it does not fit the surrounding social world where it evolves.

In this concept, social agents evolve strategies that are appropriate for their social environment. For instance, teachers as social agents generally update their methods to respond to pedagogic developments in their social world. However, the habitus (teachers' space of change and innovation) in Saudi Arabia is controlled by educators and policymakers. For example, even if Saudi teachers realise the importance of changing the current teaching methods, which place students in more passive roles by emphasising the retention of knowledge, the implementation of methods that foster student participation may still be limited by a lack of resources. This limitation can

be attributed to the beliefs towards teaching and learning (*doxa*) that are held by other social agents within the educational field, such as headteachers and educational supervisors. This is problematic because of the power differences in Saudi Arabia, which have been recognised among those working in the Saudi educational field, resulting in the allocation of resources proceeding centrally from ministry staff to headteachers and finally to the teachers. The consequence of this is that those who have ultimate ownership of resources must be convinced of the need for change before meaningful innovation can occur.

The concept of ‘field’ describes the social and institutional contexts in which individuals attempt to achieve their goals or obtain resources. It reflects the social space in which individuals think, interact and take positions (Hilgers and Mangez, 2015), which can include such arenas as education, politics, economic, religion and culture (Thomson, 2008). Some degree of overlap might occur among these fields, as can be seen in religious or multi-ethnic schools in which interactions occur between religion, culture and education. However, Bourdieu asserts that each field in our social world has its relative space of autonomy based on its unique knowledge, perceptions, rules and positions (Hilgers and Mangez, 2015). Indeed, fields hold their positions according to the level and type of capital that they occupy in a given society, including social, cultural, economic and symbolic capital. In this context, the term ‘field’ denotes:

A network, or configuration, of objective relations between positions. These positions are objectively defined, in their existence and in the determinations they impose upon their occupants, agents or institutions, by their present and potential situation (*situs*) in the structure of the distribution of species of power (or capital) whose possession commands access to the

specific profits that are at stake in the field, as well as by their objective relation to other positions (Bourdieu and Wacquant, 1992, p. 97).

This definition implies that the power relation between and within different fields can structure human behaviour, suggesting that a comprehensive understanding of human behaviour requires knowledge of the social space in which interactions occur and the types of power relations involved (Thomson, 2008).

Social institutions are a place in which individuals struggle for their positions and are willing to use any techniques to win. For example, Bourdieu notes that in art, the primary focus of his theories of field, artists often sought to obtain their positions by abolishing the positions of the previous generations of artists. The power of individuals between different social institutions, or within a single one, can contribute to the culture of learning, by either changing or preserving perspectives and practices (Hodkinson, Biesta and James, 2008). For example, the field of education in Saudi Arabia is part of a wider learning culture that is influenced by multiple social institutions, perhaps the most important of which are family and religious scholars. The family is a particularly important social institution in Saudi Arabia, comprising the foundation of individual identity and communal standing (Alhamdan, 2018). Saudi families often forge bonds with others that share similar lifestyles and attitudes, creating communities of allied relationship groups that socialise together. Sons and daughters are expected to live at home until they marry and, even then, many individuals stay near their relatives. In many Saudi families, parents profoundly influence the knowledge, practice and attitudes of their children who are in turn required to listen, obey and respect their parents (Alrashidi, 2015). The hierarchical structure among children and parents has also been integrated into Saudi

schools, with teachers being perceived as the best source of accurate knowledge. These perceptions can work against the implementation of collaborative teaching approaches like PT, because teachers in Saudi Arabia are also perceived as parents to their students, who must show respect, obey their commands and receive knowledge passively. The dominant role of teachers provides little room for students to work collaboratively or argue against the information that teachers impart (Aldubai, 2007). However, the influence of globalisation and social media has encouraged greater openness to other thoughts, traditions and cultures, which has started to weaken the relations between family members in some Saudi families, lessening the authority of the parental role in raising and guiding children (Alsheikhly, 2008). Therefore, it is important to rethink the relationships between children and their parents, encouraging mothers and fathers to establish dialogue with their children and being willing to listen to their thoughts and needs (Al Mizar, 2017; Alsheikhly, 2008). Teachers can also play an important role by activating the role of children in classrooms and allowing them to search for information, and to share and discuss their findings with their peers.

Religious scholars have also influenced learning and knowledge in Saudi Arabia. The importance of this field is illustrated in the prohibition on Saudi teachers from influencing the personal choices made by their students, unless those choices contravene communal religious tenets and standards of accepted conduct. When giving instruction on Islamic studies and Sharia, teachers must not deviate from the curriculum and should minimise the use of any external sources that have not been deemed compatible. Religious perspectives have also influenced the teaching of other subjects and even the academic research environment. Adherence to this approach is enforced by religious police, who ensure that Islamic values are properly upheld in social institutions, which ensures that the policies developed by academic departments are inevitably compliant with the principles and objectives of

Islamic law. Hence, if religious scholars understand that the Islamic principles perceive learning as individual responsibility for active, rather than passive, acquisition of knowledge, they can influence the current teaching practices by encouraging the creation of more opportunities for role of students to be activated.

The implementation of PT in Saudi Arabia may be also influenced by the notion of community of practice (CoP) (Lave and Wenger, 1991). One of the most important discussions in the context of the current study is whether or not it is possible to view Saudi schools as CoP. This concept perceives knowledge acquisition as the result of interactions between those participating in a learning activity, rather than a process that occurs in isolation. At a school level, a CoP exists when teachers work collaboratively to share knowledge and discuss the best provisions for students. However, this does not exist in all schools. For example, inclusive schools in Saudi Arabia usually have one distinct teaching team for mainstream students and another for SEN students. These teachers receive different education, with different specialisations, under different educational departments (Abunayyan and Aljaloud, 2016; Alenizi, 2012), often yielding markedly different perspectives on protocol or classroom practice and minimal interaction between groups in the implementation of PT.

The power disparity between SEN and mainstream teachers in some Saudi schools can also negatively influence the notion of CoP. This has been reflected in the literature, with the majority of SEN studies in Saudi Arabia focusing on the attitudes among mainstream teachers towards SEN students, with little investigation of related issues, such as the attitudes of mainstream teachers towards SEN teachers or the status of SEN teachers and their relationships with mainstream teachers. However, Abunayyan and Aljaloud (2016) investigated the problems facing SpLD programmes in girl's primary schools in Riyadh. These programmes were underperforming due to the non-

adherence of mainstream teachers to the schedules agreed with SEN teachers, such as preventing SpLD students from visiting the learning resources room for individual support. Similarly, Alayed et al. (2011) examined the obstacles faced by SEN teachers in inclusive schools for both girls and boys in Taif city in Saudi Arabia. Their findings illustrated that non-acceptance of mainstream teachers with SEN teachers' recommendations is a main obstacle in the provision of effective support to SEN students. Official SEN policy states that mainstream teachers have a duty to collaborate with SEN teachers and use teaching methods that meet individual differences among students (MoE, 2001). However, the evidence suggests that these policies are not always activated, perhaps due to the power imbalance in many inclusive schools in Saudi Arabia. This might also be attributable to the lack of supervision systems to ensure that teachers fulfil their responsibilities towards SEN programmes. Another possible explanation is that collaboration may threaten the autonomy of mainstream teachers, many of whom have often worked for many years in isolated, non-communicative teaching environments (Al-Hammdi, 2014). This situation could be exacerbated by the negative attitudes expressed by some mainstream teachers towards students with SEN. It is therefore essential to establish training workshops for mainstream teachers to increase their awareness of SEN students, and particularly SpLD students, thereby improving collaboration between the teaching team (Almarshedi, 2008).

CoP can also exist at the classroom level. For these communities to exist, students must work together, participate in common activities, share their personal experiences and be prepared to engage actively in their larger community (Barab and Duffy, 2000). This requires learners to have diverse opportunities to interact with their peers in the fulfilment of learning tasks, under the supervision and guidance of teachers. It might also require changes in the classroom layout or assessment methods, which are commonly based

on summative tests (Crossouard, 2009). More formative assessment would allow teachers to provide feedback based on the progress of students during classrooms activities.

However, there is a lack of learning practices in Saudi Arabia that encourage students to participate in common activities. The exception is when students sometimes work with their peers sitting next to them to answer curriculum-based exercises. This is particularly prevalent in middle and high schools, because teachers are often required to deliver high volumes of complex material in a limited time. This approach also relates to the tendency among teachers to transmit knowledge (*doxa*) to ensure that students receive accurate information, which places students in a more passive role and limits their opportunities to engage in social or group-based activities. CoP among learners in Saudi Arabia are generally not found in relation to teaching national curriculums, although they exist in relation to the extra-curricular activities, such as crafts, school press and school radio. Most commonly, students are members of a social groups that pertain to social and religious activities, such as prayer or the celebration of religious events.

These practices reflect the teaching approaches that take place in traditional Qur'an schools, in which learners usually study individually, only working in pairs for the purpose of validating the recitation of the Qur'an to each other. However, it is important to note that Islamic principles also encourage Muslims to be an active part of the wider community and share what they have learned with others (Abdul Rahman and Muktar, 2014). Indeed, one of the primary aims of education in Islam is to encourage collaboration for the betterment of society as a whole and the dissemination of knowledge (Al-Sawi, 1999). Schools can achieve this aim by encouraging students to not only validate the recitation of the Qur'an to each other, but also to discuss and share their understandings and interpretations of the meanings of the texts. This approach can be also applied to other school curriculums, with advanced

students imparting knowledge to their less advanced peers and providing an opportunity for those students to ask, argue, discuss and broaden their knowledge. In essence, a discussion of Islamic principles, as well as individual interpretations of these principles, is instrumental to any social research in Saudi Arabia because these principles govern the entire function and goal of Islamic society. Understanding disability in this context, as well as associated factors and tensions, and the roles of all stakeholders, is critical to the success of the case study in this research.

In summary, this section has analysed the Saudi educational system through the lenses of the theory of practice (Bourdieu, 1990) and CoP (Lave and Wenger, 1991). This examination has demonstrated that the concept of knowledge and teaching practices in Saudi Arabia are profoundly influenced by Islamic principles and the traditional collective culture. The following section clarifies the definition of PT and examines the nature of interactions among learners within different types of this approach.

2.3 Peer Tutoring

The concept of PT can be found in many terms, including peer mentoring, peer assisted learning strategies, peer-mediated learning, peer learning and peer support, all of which involve students teaching other students. This concept is ancient (Topping, 1998; Wagner, 1990; Bell, 1808) and may even be “as old as any form of collaborative or community action” (Topping, 2005, p. 631). Teachers in planned school settings have used student relationships since the time of Aristotle, who relied upon student leaders for assistance (Hamm, 2011). However, the practice had declined in popularity until its relatively recent revival.

Traditional linear paradigms of knowledge transmission viewed peer tutors as substitute teachers. However, developments in education led to the

recognition that PT interaction is different from the normal teacher-student, with its own inherent advantages and disadvantages, leading to the suggestion that co-operative student groups might work best alongside teachers, as well as under their supervision (Topping, 1996). Recent pedagogical studies suggest that PT should not be confined to transmission from strong students to their less able peers, although this broadening of understanding has prevented agreement on a consistent, universally accepted definition for PT (Korner and Hopf, 2014).

PT is an evidence-based practice that offers many academic and socio-emotional benefits for tutors and tutees. For tutors, the benefits included an improved understanding of the learning content (Schramm, Brown and Street, 2009; Harris and Shaw, 2006); increased positive attitudes to schools (Sheldon, 2001); wider social relationships (Carter et al., 2013) and increased self-confidence (Clarkson and Luca, 2002). For tutees, the benefits of this approach included improved learning skills in different subjects, such as reading and mathematics (Wexler et al., 2015); improved social interaction behaviours (Xu, Gelfer and Perkins, 2005) and higher self-esteem (Gisbert and Font, 2008). These benefits were associated with a range of different factors, including the individualised nature of PT (Kotsopoulos, 2008); increased opportunities for student response (Harper and Maheady, 2007); the opportunity for immediate feedback (Villareal, 2013); and the closeness between tutors and tutees in comparison with classroom teachers (Hamm, 2011)

However, PT implementation raises questions regarding the authority of knowledge, especially in traditional learning environments, where the role of teachers is to transmit knowledge (Fougner, 2012). Implementing PT require teachers to shift their role from the delivery of knowledge to facilitating the process of building knowledge among students (Thompson, 2011). This shift

means that certain challenges can influence the implementation of PT, including the need to train peer tutors to fully equip them to support their peers (Holecek, 2012); establish a systematic planning for PT sessions (Miller, 2005); and schedule ongoing meetings between teachers and students to evaluate the progress of each PT programme (Carter et al., 2013).

2.3.1 Key Theoretical Perspectives on Peer Tutoring

This section aims to examine the nature of PT and delineate the processes through which it enhances learning. In fulfilment of this aim, this section reviews the relevant literature on cognitive development theory and social constructivism theory, which are instrumental to the understanding and implementation of PT. Prior to the examination of these theories, it is necessary to make explicitly clear that most perspectives in PT are not contradictory, instead emphasising certain characteristics that are crucial in a given PT programme.

2.3.1.1 The cognitive development theory

This section discusses PT through the theory of cognitive development, which originated with the work of the Swiss philosopher, Piaget, who developed the concept of cognitive structures from his work with children (Pritchard, 2013; Phillips and Soltis, 2004). This concept describes the way that children construct knowledge, by linking the received information to their previous experiences, to search for similarities, differences or even conflicts which then guide them in building their own ideas (Phillips and Soltis, 2004). In studying how children process information and produce knowledge, Piaget found that the cognitive structures of children develop differently within the four main stages of their life: “sensori-motor, pre-operational, concrete, and formal” (Blake and Pope, 2008, p. 60). Children in the first stage (starting

from birth to two years old) discover the outside, tangible world through direct use of their five senses in pursuit of understanding (Campbell, 2006). For example, children at this stage tend to disassemble and reconstruct their toys to learn more about them. The second stage (from two to seven years old) is characterised by the development of symbolic thinking, as the perceptions and behaviours of the child become more logical (Blake and Pope, 2008). Logical thinking develops further in the third stage (from seven to eleven years old), as a better understanding develops of the distinction between concrete things. Finally, during the fourth stage (from twelve years and older), the child begins to form and analyse abstract concepts by examining problems from different angles, following logical assumptions, explaining hypotheses and addressing a wider range of possible solutions (Piaget, 1950).

Piaget proposed that children's thought processes evolve from one stage to the other based on three cognitive processes: "assimilation, accommodation, and equilibration within and across stages" (Ward and Lee, 2005, p. 207). Assimilation occurs when children understand and integrate new information into their prior knowledge, which exists within their cognitive structures. Accommodation usually requires the cognitive structures of children to change to enable understanding of novel information (Piaget, 1954). Assimilation can be tracked when students use their previous knowledge to complete a given task, such as the use of previous mastery of multiplication tables to answer a mathematical question that requires multiplication. In contrast, accommodation can be tracked when students need to modify their existing knowledge to complete a given task, such as when students realise that their knowledge of multiplication tables is insufficient for multiplication tasks involving long numbers and that these also require other mathematical operations, like addition and subtraction. The third cognitive concept, equilibration, occurs when children reach a state of cognitive balance between

using (assimilation) and modifying (accommodation) their existing mental schemas (De Lisi and Goldbeck, 1999).

Researchers have devised a number of interpretations of Piaget's theory. For instance, some (e.g. Amin and Valsiner, 2004; Tappan, 1997) argued that Piaget focused solely on individuality, by explaining the internal processes in which children construct knowledge and neglecting the impact of social interactions on construction of knowledge. Others (e.g. Lourenço, 2012; Ward and Lee, 2005) contended that Piaget considered the influence of the social environment on the cognitive development of children. For example, Piaget observed that collaboration helps children to exchange ideas and activate their cognitive operations (Lourenço, 2012), which is essential for devising meanings and developing understandings (Fawcett and Garton, 2005). Piaget's theory holds that social collaborative platforms, such as PT, help children to become more sensitive to other perspectives (Keer, 2002). Nonetheless, he argued that this collaboration cannot be achieved with adults or even with more capable peers, as these kinds of relationships usually place the child in isolation (Piaget, 1932), thereby preventing the free expression of their real perspectives. This absence of hierarchical power structures within child interactions creates a motivational atmosphere in which different ideas can be expressed (Thurston et al., 2007).

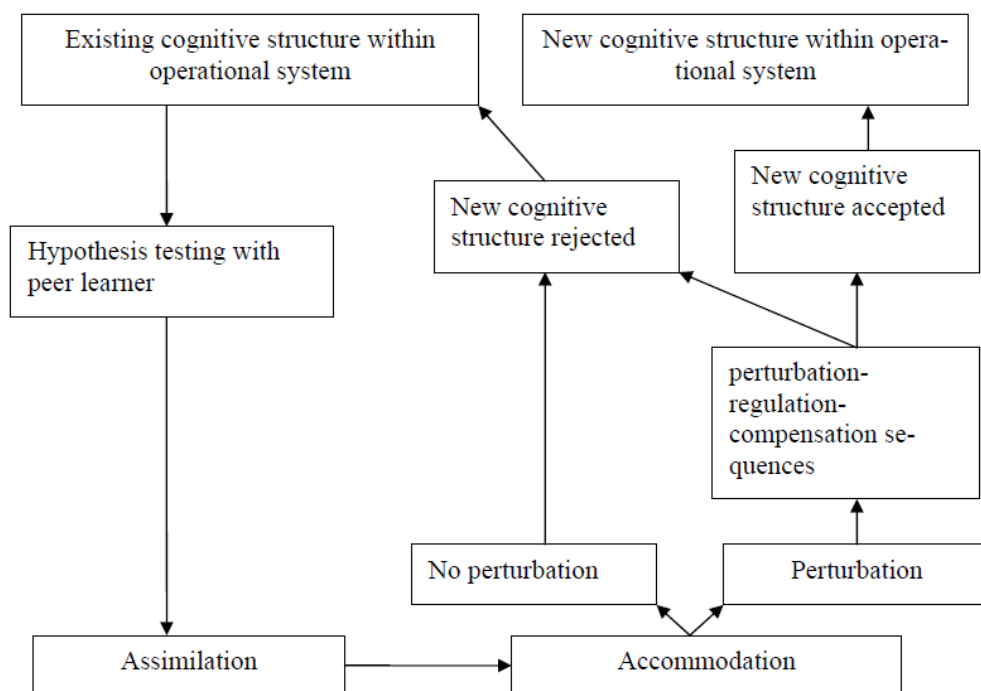
According to the Piagetian perspective, interactions between equally able partners enhance cognitive growth by facilitating the state of equilibrium in which the processes of assimilation and accommodation are more likely to be in balance (Thurston et al., 2007; De Lisi, 2002; O'Donnell and King, 1999). According to Piaget (1954), the process of assimilation tends to function on an 'overly subjective' manner among children. For instance, children tend to form concepts about the things they encounter in their world based on their personal perspectives and their own desires (O'Donnell and King, 1999). In parallel, the accommodation process tends to function on an 'overly docile'

manner (Piaget, 1954), which can be noticed in early child development, when infants repeat utterances made by their parents and imitate their actions (O'Donnell and King, 1999). The consequence of this in terms of PT is that programmes operating with equally able peers are more likely to foster symmetric rather than unilateral relationships, which helps to limit the likelihood of their manner being either overly subjective or overly docile (Piaget, 1959). This outcome can be attributed to the cooperative nature of PT, which provides more opportunities for mutually respectful, communicative partners to explain, discuss, question and examine solutions (De Lisi and Goldbeck, 1999). In so doing, tutoring helps students to avoid overreliance on their personal understandings when making decisions, instead encouraging them to modify their current cognitive structures and to make new meanings by reflecting on the perspectives received from their peers (O'Donnell and King, 1999). In parallel, PT offers a judgment free environment in which students can evaluate and challenge the perspectives of their peers, rather than passively absorbing transmitted knowledge.

The notion of cognitive conflicts is central to understanding the effectiveness of implementing PT based on the Piagetian principles (Kim and Baylor, 2006; Webb and Mastergeorge, 2003; Gobeck and Sinagra, 2000). This theory holds that PT can create optimal contexts for cognitive conflicts, with students being exposed to diverse perceptions from their peers that might contradict with their own views, leading to disequilibrium (Fawcett and Garton, 2005). This encourages learners within collaborative PT contexts to explain their arguments, exchange ideas and re-examine their own beliefs to reconcile the contradicted perceptions, test new ideas and gain new knowledge, ultimately resulting in equilibration (Webb and Mastergeorge, 2003). The challenge from an equal partner can create environments for learners to actively express their own understandings until a resolution is achieved (Kim and Baylor, 2006): "Criticism is born of discussion and discussion is only possible

amongst equals” (Piaget, 1932, p. 409). The way that the approach to peer learning espoused by Piaget fosters learning through the notion of cognitive conflicts was first modelled by De Lisi and Golbeck (1999) and later refined by Thurston et al. (2007) (see Figure 2.1).

Figure 2.1 Social constructivism through Piaget conflict



(Source: Thurston et al., 2007, p. 482)

According to this model, an external disturbance or challenge, such as exposure to an individual holding a different perspective, or a ‘new cognitive structure’, can result in a situation that necessitates resolution. This process results in the following outcomes: the disturbance causes the child to think differently and develop a new mental structure (accommodation); or there is no meaningful difference from the existing model, so their original beliefs are

reinforced (assimilation); or the child evaluates both models, rejects the new and returns to their old way of thinking (assimilation). All these results can enhance an individual's understanding of the new cognitive structure, which helps a state of equilibration to be achieved.

In summary, the Piagetian tradition argues that the equal status between peers gives both the ability to agree or disagree, as well as to challenge their current cognitive structure (disequilibrium), thereby enabling them to learn more effectively and reach a state of (equilibrium) through the processes of assimilation and accommodation. The conflicts and free discussion highlight poor reasoning, resulting in cognitive development and higher-quality understanding (Alvermann, 2000; Slavin, 1995). Studies have shown that students in a peer-learning situation can learn, even when neither has a high level of competence (Schwarz, Neuman and Biezuner, 2000), which may have far-reaching implications for students with SEN, with peer interactions empowering them to think actively and build their own knowledge of the world (Wilkins, 2008).

It is important to note that matching equally able partners does not inevitably result in cognitive growth, with studies suggesting that other factors can also influence the success of this kind of PT. For example, while Foot and Howe (1998) argued that peer learning is productive as long as the parties have different beliefs and have tasks that effectively challenge those belief structures, it is important to ensure that tutoring activities are sufficiently complex to challenge the capabilities of both partners (De Lisi, 2002; O'Donnell and King, 1999).

2.3.1.2 The social constructivism theory

This section discusses PT through the lens of social constructivism, which originated from the work of Vygotsky and argues that learners are at the

centre of the learning process, with social interaction playing a vital role in knowledge acquisition (Vygotsky, 1978). This theory is oriented around the idea that instead of working internally, in isolation, mental functions function through social interactions with others, leading to cognitive development (Kim and Baylor, 2006). Central to these interactions is the role of mediation in shaping learning experiences among individuals. Children will eventually reach abstract understanding, but high value mediation will help them achieve this more quickly (Vygotsky, 1978). A crucial considerations in determining the effectiveness of mediation is the use of language, which enables development of effective conversations that enhance learners' understandings (Blake and Pope, 2008). Through conversations with their peers, children process and manage problems, as well as exchanging ideas and obtaining information, which enables them to develop their knowledge (Vygotsky, 1978).

Vygotsky discovered two important zones in learning and developmental processes: the "Zone of Actual Development" (ZAD) and the "Zone of Proximal Development" (ZPD) (Vygotsky, 1978, p. 87). ZAD can be identified when students can complete a given task independently, which typically occurs when the task utilises previous knowledge and experiences (Blake and Pope, 2008). In contrast, ZPD describes "the distance between the actual development level, as determined by independent problem-solving, and the level of potential development, as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1987, p. 86). ZPD is closely linked to the notion of PT, as it stresses the value of the support provided by peers to help students complete tasks that would otherwise be beyond their individual abilities (Li and Lam, 2013); this form of peer support is known as 'scaffolding' (Azevedo and Hadwin, 2005). This theory states that PT sessions enable tutors to foster active engagement of the tutees in learning activities, helping them to exceed

the limitations within their ZAD and reach mastery within their ZPD (De Backer, Van Keer and Valcke, 2016). According to Vygotskian principles, the one-to-one ratio in PT sessions maximises the time spent on the task (Topping and Ehly, 1998), providing more opportunities for tutees to observe and model the strategies used by their tutors to solve complex problems and complete difficult learning tasks (Fawcett and Garton, 2005).

The core idea of PT within the concepts of ZPD and scaffolding is that more capable peers have the knowledge, experience and skills to guide their less able peers in performing the tasks that those students would be unable to complete without assistance (Kim and Baylor, 2006). This perspective argues that peer tutors require to provide “a cognitive model of competent performance” to their tutees (Thurston et al., 2007, p. 482). In other words, peer tutors need to be sufficiently skilled to facilitate the tutees’ acquisition of the required subject matter, to assess their progress, to correct their misunderstanding or behaviour and to provide immediate feedback (Topping and Ehly, 1998). The value of pairing students with more skilful peers, based on the Vygotskian perspective, has been justified by a number of researchers. First, greater ability or expertise in the learning content will help the peer tutor to provide support above the level of the tutee’s ZAD (O'Donnell, and King, 1999). Second, more skilful peers are typically more able to understand their partners’ strengths and weaknesses, which helps them to explain difficult tasks using simple, familiar concepts (Webb and Mastergeorge, 2003), making it easier for tutees to understand and meaningfully engage with tasks. Their understanding of their partner’s needs also allows tutors to plan learning activities more effectively, adjusting their level of support and the complexity level of the task, as well as interacting in a manner that suits their partner’s ZPD (Fawcett and Garton, 2005).

The social constructivist philosophy has recently been expanded with the concept of cognitive apprenticeship (Brown, Collins and Duguid, 1989), in which students learn skills in a manner that resembles traditional apprenticeships (Clarkson and Luca, 2002). This notion describes the acquisition of knowledge through mentors, who should be sufficiently skilled to facilitate the process of solving realistic, practical problems in authentic settings, rather than being skilled in teaching. This is a realistic human setting, with learners acquiring competence through activities, rather than the teaching of abstract concepts. Arguably, this approach empowers students to overcome non-familiar problems to reach culturally appropriate solutions (Clarkson and Luca, 2002). PT is aligned with these aspects of social constructivist theory through negotiation with the student tutor and tutee, promoting knowledge construction through communication and dialogue, which may be especially helpful for tutees (Topping, 1996).

ZPD is closely linked to the notion of peer learning and intersubjectivity, which describes the ability of students to engage in discussion that transcends their own minds (Thurston et al., 2007), enabling them to reach a shared understanding. According to Fawcett and Garton (2005), intersubjectivity will not be achieved if peers start discussions at the same level of understanding of the learning task, as there will be no differences between performing the task socially or individually. Therefore, different levels of understanding among peers is essential to encourage their cooperation and the integration of different perspectives to reach a joint understanding. In these kinds of peer learning contexts, interactions are cooperative, with shared questioning and discussion, rather than more conventional guidance. In other words, peers collaborate to reach a joint understanding (Hogan and Tudge, 1999), enabling long-term cognitive growth through the internalisation of ideas and new patterns of thought (Bukatko and Daehler, 1995).

Another essential consideration for PT in terms of the concepts of ZPD and scaffolding is the role of language. The social constructivism theory holds that the culture and tools (including language) of a particular society influences students' cognitive development (Westbrook et al., 2013). Language plays a significant role in establishing dialogues that enable children to scaffold each other's learning and develop understanding. During the process of scaffolding, less competent learners benefit from linguistic functions, including questioning, explaining, narrating, and summarising (Haider and Yasmin, 2015). Language also facilitates the expression of perspectives, exchanging knowledge and receiving feedback, meaning that childhood development is strongly influenced by linguistic prowess, implying that language enables the development of the mind (Li and Lam, 2013). Peer tutors tend to share the same language and culture of their students, which helps them to establish effective tasks and offer supported instruction or feedback, while being willing to also assume a less authoritative role (Westbrook et al., 2013).

In summary, the Vygotskian tradition has potentially important implications for the field of SEN, because it stresses the importance of social interactions for the cognitive development of disabled children. The theory argues that the different competencies of peers is essential to enable scaffolding and maximise the learning potential of less able students. This suggests that SEN students can benefit from immersion in an inclusive learning environment, by pairing them with more able peers, including mainstream students. Interactions might enable SEN students to reflect on responses and improve their cognitive levels, as well as facilitate the adoption of more socially acceptable behaviour (Goodsell et al., 1992). From this perspective, peer interactions are essential for the development and socialisation of SEN students, helping them to acquire understanding through dialogue and discussion with others (Vygotsky, 1993). The most important implication of

this theory for PT is that teachers should consider the use of cooperative learning forms and enable their students to mediate their learning within their ZPD, as this is likely to enable better learning outcomes than they would attain when working alone (Aleid, 2015).

2.3.1.3 The main similarities and differences between the theories

This section seeks to summarise the key similarities and differences in understanding PT through cognitive development and social constructivism theories. The main difference between Piaget's and Vygotsky's PT theories revolve around his claim that interactions between students with different abilities are essential in effectively influencing the ZPD. Social constructivism holds that shared settings influence learning, enabling less able students to gain knowledge from the knowledge scaffolded by more able students (Zeneli, 2015; Vygotsky, 1986). The Vygotskian perspective is predicated on the importance of social interactions in the development of thought. In this perspective, the progress that children make in knowledge acquisition occurs through the guidance provided by the monitoring and support of more competent partners. Vygotsky stresses asymmetrical interactions, arguing that cognitive growth occurs in response to contact with better-educated individuals, including peers who are intellectually more competent (Matusov and Hayes, 2000). In contrast, Piaget argues that children were more suited to growth, which is characterised in terms of four developmental stages, and through collaborative symmetrical interactions between peers of similar ability and levels of knowledge (Kang et al., 2003; Verba, 1998). Here, the application of a stimulus-response process enables students to search for meaning through assimilation and accommodation (Piaget and Inhelder, 1969). Piaget's theory holds that interactions should involve questioning, evaluating and disagreeing between peers who share similar abilities, whereas Vygotsky's theory states that interactions should

involve students hinting to help less competent peers to construct knowledge (Zeneli, 2015; Thurston, et al., 2007).

Proper understanding of collaboration demands examination of Vygotsky's theory in its entirety, not simply ZPD (Hogan and Tudge, 1999), as the theory states that knowledge construction is shaped by the historical, cultural, social and personal characteristics of individuals, in addition to the quality of cross-ability peer interactions (Matusov and Hayes, 2000). Communication between children is influenced by age, gender, language, experiences and life-history trajectories (Garton, 2004), which manifest in different ways, according to the task and partner (Hogan and Tudge, 1999).

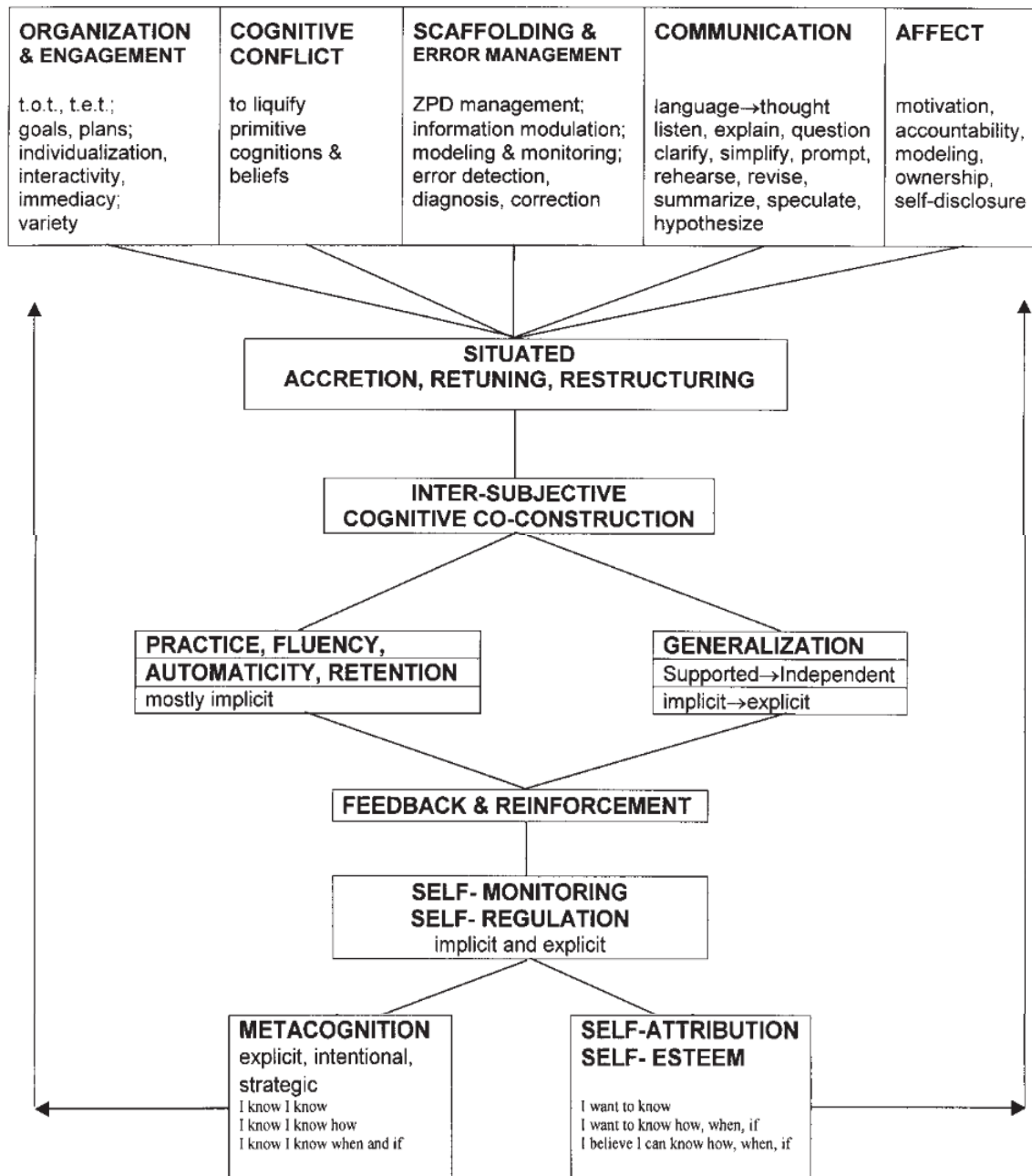
It is evident that profound differences exist between the peer learning theories of Vygotsky and Piaget. However, they agree that the developing person dynamically creates knowledge and comprehension from external information, instead of absorbing it passively and inactively (Woolfolk, 2007). Both theorists also agree that development occurs because children are active learners, whether from organising new information to reach a pre-existing level of knowledge, or through their involvement in the learning process. They also stress the role of social context in the knowledge construction process, including the motivating role of peer interactions (Blatchford et al, 2003). Both stress the importance of similar authority between the tutee and the tutor (Zeneli, 2015), with interactions occurring under horizontal distribution of power and shared responsibilities, unlike in adult-student relationships (Blatchford et al, 2003).

While not expressed directly, both theories also agree on the individual nature of PT. This manifests in terms of consistent attention and the active involvement of participants, which is supplemented by the ability of the tutor to tailor the experience to meet their needs or capabilities, such as personal cognitive processing speeds. This strategy can give students opportunities to

practice at their specific level to meet their social and academic objectives. PT also gives students a greater chance to participate, whether through reading, writing or discussion. This is supplemented by continual explanation and demonstration, individualised pacing, and the provision of immediate and direct feedback (Ayvazo and Aljadeff-Abergel, 2014). PT enables a reward, which may be academic, moral, social or tangible, to be awarded in response to the effort and performance of an individual student. The individualised character of this approach also enables the reward system to be effective, reliable and consistent (Karagiannakis, 2008; Medcalf, Glynn and Moore, 2004).

Furthermore, it is important to consider that the existence of both symmetrical and asymmetrical interactions as options in sufficiently complex and challenging PT creates certain specificities that can foster peer learning (Verba, 1998). Studies have shown that many asymmetrical and symmetrical socio-cognitive processes can result in progress (Musatti, Verba and Mayer, 1994; Verba, 1994). The social constructivist model and cognitive-conflict, characteristics belonging to Piaget's constructivism, are included in the theoretical model of peer learning illustrated below (Topping and Ehly, 2001) (see Figure 2.2).

Figure 2.2 Theoretical underpinnings of Peer Assisted Learning



In iterative cycles: **Surface → Strategic → Deep** **Declarative → Procedural → Conditional**

(Source: Topping and Ehly, 2001, p. 125)

In this model, cognitively demanding peer relationships should involve cognitive conflict to help challenge established preconceptions, with tutors using scaffolding to empower tutees to learn within the ZPD (Topping and Ehly, 2001). Normally students within PT activities are not solely involved in disagreeing, questioning and defending their own arguments, per Piaget's theory, or the acts of explaining and providing guidance, as with Vygotsky (Zeneli, 2015). In real learning situations, the social constructivist approach can evolve into the cognitive development approach, or vice versa, depending on factors including the difficulty of the learning task, the background knowledge of the students, or the learning materials and guidance provided by classroom teachers (Zeneli, 2015; Roseth, Johnson and Johnson, 2008; Foot and Howe, 1998). Hence, understanding the way that these theories influence student interactions can inform selection of students and organisation of learning tasks to activate the role of tutors and tutees, making their participation in PT activities more beneficial. For example, teachers can vary task levels, to allow students to give individual arguments or provide explanations to their peers.

In summary, implementing PT through the lens of the cognitive development theory requires pairing students who have a similar level of abilities, thereby challenging their cognitive structure through disagreement, questioning and examination of different perspectives until they reach a state of equilibration. In contrast, social constructivism theory requires tutors to be more skilful than tutees, allowing them to provide support and guidance to help tutees maximise their mastery within their ZPD. Both theories emphasise the value of social interactions among students within PT contexts. The following section evaluates the effectiveness of PT in terms of its impact on the academic and socio-emotional development of students with SEN by investigating related empirical studies.

2.3.2 Types of peer tutoring and the nature of students' interactions

There has been intense debate about the types and formats of PT in an attempt to optimise the design and implementation of programmes to meet the needs of students of all levels of ability. There are various forms of PT (reciprocal, unidirectional, cross-age, same-age and class-wide tutoring), the effectiveness of which are largely dependent on external and internal factors, including student characteristics and the nature of interactions. The main types of PT discussed in the literature are examined critically below.

2.3.2.1 Reciprocal and unidirectional peer tutoring

The debate regarding the dynamics of the relationships between students in PT is primarily focused on whether student tutors should concentrate on supporting their peers (unidirectional peer tutoring (UPT)), or whether both should collaborate to acquire new knowledge and skills (reciprocal peer tutoring (RPT)).

UPT refers to the transmission of knowledge from one student (usually the more competent peer) to another student (usually the less competent peer), in teacher-organised groups (Pyle, 2015). Advocates of UPT argue that the linear model of teaching does not prevent cooperative learning (e.g. Flores and Duran, 2016). Despite the asymmetrical relationship between students, the shared goal of improving tutee performance represents a degree of cooperation. However, all students in cooperative groups are workers and helpers, whereas PT involves one student as the helper and the other as a worker (Zeneli, Thurston and Roseth, 2016; Johnson, 2014). In both approaches, teachers perform a planning role, as well as helping students to reflect on their learning. However, PT requires teachers to fulfil the additional role of training students in their roles, particularly equipping tutors with the

skills to support their peers (Iwata and Furmedge, 2016; Berghmans et al., 2013). These skills include effective monitoring, pacing, and providing clear explanations, as well as understanding disabilities, monitoring, and evaluation.

As noted above, there are perspectives on PT that do not perceive the method as being inherently linear, with recent developments moving towards the use of PT to engage all members of the educational community (e.g. De Backer, Van Keer and Valcke, 2016; Wood et al., 2013; Oddo et al., 2010), given that all students require cognitive development and could therefore benefit from PT interactions. For example, students might learn a subject better while helping another (Aleid, 2015). This has increased interest in RPT, in terms of its application with SEN students (e.g., Mackiewicz et al., 2011; Sutherland and Snyder, 2007; Mastropieri et al., 2001). RPT enables peers to exchange the tutor role during tutoring sessions (Duran and Monereo, 2005) to allow all students to benefit from both giving and receiving explanations and feedback (De Backer, Van Keer and Valcke, 2016). This type of tutoring has potential academic and socio-emotional advantages for SEN students. Training in both PT roles, gives students more exposure to peer modelling and opportunities to process learning material (Harris and Heron, 2001), which is particularly beneficial for students with reading difficulties (Wood et al., 2013). The tutor role also requires students to engage with content critically, forcing them to evaluate their understanding of a topic carefully (Rohrbeck et al. 2003) and even gain new ideas from the group skills and experiences (Cho and Cho, 2011). This might help students to develop and retain long-lasting competencies (Dochy et al. 2003), as well as becoming more cooperative and communicative (Topping, 2005). In these kinds of scenarios, students with a range of SEN have exhibited numerous improvements, including on-task behaviour, basic maths skills, time involvement, and participation (Holecek, 2012); improved error correction,

reading accuracy and comprehension skills (Villareal, 2013); improved reading fluency (Wright and Cleary, 2006) and more effective self-regulated learning (Shamir and Lazerovitz, 2007).

In UPT, tutees may dislike or resent their tutors due to inequality in social status. RPT can reduce social inequality, with students with disabilities often being perceived as inferior due to their need for help (Bond and Castagner, 2006). Role theory states that individuals act according to their roles, meaning that acting as a tutee may lead students to behave less competently (Leung, 2015). In contrast, giving assistance can increase self-esteem, which is particularly important for SEN students (Bond and Castagner, 2006). When students give help, they also become less reluctant to receive assistance (Topping, 2005). RPT enables the enhancement of mutual interactions within the framework of common aims and shared values, giving opportunities for teachers to reward cooperative students, which makes the school culture more caring and cohesive (Eskay et al., 2012). Students with SEN acquire socio-emotional benefits from involvement in RPT programmes, including increased appropriate social interactions (Blake et al., 2000; Laushey and Heflin, 2000); improved social development (Ashman and Elkins, 1990); and increased self-determination (Gillman, 2006) and confidence (Burns, 2006; Gillman, 2006).

Use UPT or RPT involves consideration of several factors, including instructional goals, the age or development differences between the students, and the skill levels of both parties (Villareal, 2013). Skill discrepancies can be problematic with RPT, because students need to provide useful feedback, appropriate modelling, and explanations (Mackiewicz et al., 2011), which can be more difficult for SEN students. In terms of differences in age or development, cross-ability tutoring can limit the benefits for the stronger partner (Evans and Michael, 2013). Cross-ability tutoring can be particularly

difficult for SEN students when social issues make others reluctant to exchange ideas or engage in constructive discussions (Cohen, 1994), or when the SEN students have limited skills (Wood et al., 2013).

The importance of pairing students carefully means that teachers are instrumental to the success of RPT (Mackiewicz et al., 2011). Potential participants must be evaluated in terms of their academic, personal and socio-emotional characteristics, as well as learning disabilities. Teachers must then train both students in their role as tutor and tutee (Nath and Ross, 2001). Finally, effective planning is essential in RPT, because learning may be adversely affected by poor structure of activities (Lueg, Lueg and Lauridsen, 2016; Dufrene et al., 2005) or the lack of teaching aids that facilitate positive interactions which could potentially include educational games, flash cards, worksheets, and multi-media presentations.

2.3.2.2 Cross-age and same-age peer tutoring

As the name suggests, Cross-Age Peer Tutoring (CAPT) involves older students tutoring younger students (Roscoe and Chi, 2007), making it relatively common in schools, because of the preconceived notion that associates tutors with the role of teachers (Duran, 2010; Duran and Monereo, 2005). CAPT can include students of different years, regardless of disabilities, or even middle school students tutoring those in primary school (Iyer, 2011). Because of the assumption of tutor superiority (Roscoe and Chi, 2007), this form of tutoring is often non-reciprocal (Gumpel and Frank, 1999). Older students are typically perceived as being more competent, experienced and reliable (Lieberman and Houston-Wilson, 2009; Block, 2007; Sheldon, 2001), so are often believed to require less training in the tutor role (Villareal, 2013).

CAPT has offered a number of benefits, such as improved spelling skills, reading fluency and comprehension (Mitchell et al., 2016; Van Keer and Verhaeghe, 2005; Davenport, Arnold and Lassmann, 2004); higher academic performance in mathematics (White, 2000); improved self-esteem (Kreuger and Braun, 1998); higher levels of student motivation, confidence and enjoyment (Topping et al., 2004; Merrett and Thorpe, 1996); and improved social interactions (Gumpel and Frank, 1999). SEN students have benefited from CAPT via improved reading skills and reading fluency (Hayes, 2012; Wright and Cleary, 2006); increased feelings of self-worth and positive attitudes to school (Nugent, 2001); and overall social skill development (Blake et al., 2000).

Despite these benefits, there is some evidence that CAPT restricts learner interaction. For instance, older peer tutors tend to use more directives, have more talking time, and use fewer open questions (Thonus, 2004), keeping learners focused on lesson content but limiting task negotiation (Huong, 2007). Additionally, in some scenarios, competing concepts of proficiency can create resistance to the PT programme (Waring, 2005). Due to their inherent nature, cross-age scenarios invariably limit opportunities for PT partners to collaborate or swap roles (Duran, 2010; Juel, 1996). In contrast, students of similar ages are more likely to be peers than in cross-age settings (Roscoe and Chi, 2007), perhaps interacting outside PT or studying in the same class. It is therefore more common for SAPT arrangements to be reciprocal (Duran, 2010), with students being more receptive to receiving knowledge from their peers (Roscoe and Chi, 2007).

There are contradictory positions on the appropriateness of SAPT or CAPT as types of PT. Zeneli (2015) claimed that SAPT joins students who are more likely to be friends and therefore improves social outcomes, whereas CAPT reduces competition, leading to a better academic performance. In contrast, other studies argued that structured interactions enable effective learning

regardless of differences or similarities in student age (Duran, 2010; King, Staffieri and Adelgais, 1998) and that positive social relationships can be developed between individuals irrespective of their ages and abilities (Villareal, 2013).

These findings suggested that differences in terms of age or ability may not be the best criteria by which to select students for PT activities, because positive outcomes do not require tutors to be the best students academically. For example, a child with learning disabilities may feel a sense of achievement from helping a younger or differently able student with an academic or social skill, effectively making the arrangement reciprocal (Villareal, 2013). This argument was supported by Holecek (2012), who proved that allowing SEN students to fulfil the tutor role can improve their academic skills and increase their level of engagement in school. Increased levels of self-regulated learning have also been found among students with learning disabilities who are given the opportunity to play the role of tutors (Shamir and Lazerovitz, 2007). Assigning SEN students as tutors can also improve social interactions in the classroom and foster positive behaviour among students (Blake et al., 2000; Laushey and Heflin, 2000).

2.3.2.3 Class-wide peer tutoring

Unlike other forms of PT, class-wide peer tutoring (CWPT) creates a system in which the whole class engages in PT at the same time (Cervantes et al., 2013), with all children being involved in the reciprocal roles of tutor and tutee, regardless of their academic ability (Xu, 2015; Abbott et al., 2006). In CWPT, all students are partnered with one another (Villareal, 2013), with students switching partners, or the whole class providing the required support, at any time in the lesson (Cervantes et al., 2013).

CWPT is useful for a range of ability levels, skills, and subject areas (Villareal, 2013; Eckhart, 2010; Kourea, Cartledge and Musti-Rao, 2007; Ward and Ayvazo, 2006; Burks, 2004). The involvement of the whole class gives CWPT a high degree of flexibility in terms of scheduling (Villareal, 2013), unlike alternatives like CAPT, which require a student to come from another class (Block, 2007). CWPT can also be less stigmatising for students with disabilities, because the whole class is involved (Xu, 2015), which removes the typical issue of SEN students being identified as requiring special assistance (Topping, 2005; Allsopp, 1997). As students share PT roles, they have increased opportunities to learn and experience social interaction with their peers (Ayvazo and Aljadeff-Abergel, 2014). Mutual assistance in the fulfilment of shared goals can also encourage group cohesion and create a positive environment in which students retain their identities while still contributing to academic success (Maheady and Gard, 2010; Roseth, Johnson and Johnson, 2008).

CWPT seeks to elicit active participations from all students, although it is most effective as a differentiated methodology that assumes different levels of student ability regarding similar tasks (Ward and Ayvazo, 2006). In this approach, tutors can record positive responses and provide immediate feedback (Block, 2007; Ward and Ayvazo, 2006), with pairs progressing to more complicated tasks (Cervantes et al., 2013). By giving time and opportunities to practice skills, CWPT can be a useful inclusive strategy in heterogeneous student groups (Cervantes et al., 2013; Ward and Ayvazo, 2006). Importantly, this approach gives SEN students the chance to have an individualised experience, with immediate feedback and increased opportunities to answer or question, while remaining with the class as a whole (Xu, 2015; Abbott et al., 2006). Numerous academic and socio-emotional benefits are associated with CWPT for students with and without disabilities across various classrooms. These include increased engagement (Arieno,

2007; Maheady et al., 2006); improved academic performance in mathematics (Jo, 2015); improved reading skills (Lundblom and Woods, 2012; Veerkamp, Kamps and Cooper, 2007; Herring-Harrison, Garder and Lovelace, 2007; Fuchs et al., 2001); better spelling performance (Villareal, 2013; Burks, 2004); improved social skills and social interaction behaviours (Ayvazo and Aljadeff-Abergel, 2014; Xu, Gelfer and Perkins, 2005; Mitchem et al., 2001); improved levels of peer acceptance and tolerance (Kamps, et al., 1994); higher confidence (Cobb, 1998); higher level of social status and self-concept (Karagiannakis, 2008); and increased levels of social approval and decreased social disapproval during both instructional and unstructured free time settings (Lawson and Trappenber, 2002).

The potential disadvantages of CWPT include significant organisational demands, greater teacher preparation time, and higher investment into training tutors (Villareal, 2013), as well as material design requirements to ensure that individual student needs are met. Since students are occupied with a range of tasks, CWPT reduces the need to manage off-task behaviour. However, teachers must manage and monitor the classroom, explaining the basic concepts that tutors can then clarify and expand (Dopp and Block, 2004). Furthermore, CWPT requires tutors to fulfil a number of responsibilities, including giving clear instructions (Ayvazo, 2006) and providing feedback to tutees and the classroom teacher (Ayvazo and Aljadeff-Abergel, 2014). Effective feedback needs to be meaningful, comprehensible and actionable, with ongoing monitoring to ensure understanding. It must also be sensitive to maintain trust, as rushing or insulting tutees can demotivate them or affect their confidence (Gilberts, 2002). For this approach to be effective, classroom teachers must train tutors to ensure that tutees remain motivated to learn.

This section has shown that there are many approaches available to the design and implementation of PT programmes. Tutors and tutees can differ in terms

of age or education level, with tutoring being integrated into class-based lessons or extracurricular activities. PT options provide flexibility to cater for variations in settings, interactions and among different participants. Despite their differences, these instructional approaches all have the potential to yield significant gains in terms of academic motivation and achievement (Niesyn, 2009), by empowering students to assume responsibility for learning, particularly for students with SEN (Hudson, Browder and Jimenez, 2014). In all of these interactions, students should talk more and play an active role in the tutoring session, developing their listening, prompting, clarifying, and reinforcing skills (Hudson, Browder and Jimenez, 2014; Thurston et al., 2007; Nath and Ross, 2001).

In summary, the diverse range of effective PT strategies provides a high degree of flexibility in terms of the actual implementation of programmes, enabling teachers or researchers to design suitable procedures for a broad range of settings and a diverse spectrum of individual needs. The following sections analyses the policies of SEN and PT within the religious-cultural context of Saudi Arabia.

2.4 An Overview of SEN Policy within the Cultural and Religious Context of Saudi Arabia

This section begins with a brief overview of the development of SEN policies and discusses how these policies on SEN are situated in the religious-cultural framework of the kingdom, then examines the guides and regulations established to support students with SpLD in Saudi Arabia.

Before 1958, the field of special education did not exist in Saudi Arabia in a recognisable form and so no formal provision existed to support individuals with SEN, who were instead cared for by their families (Battal, 2016; Aldabas, 2015; Alquraini, 2013). Special education provision eventually

began as evening Braille courses for blind people in Riyadh (Al-hano, 2006), with individual blind people involved in teaching others with visual disabilities (Al-Ahmadi, 2009). Later, the MoE created the Department of Special Education (currently called the GASE) in 1962 (Alquraini, 2011). This department was tasked with overseeing educational services and rehabilitation for people with visual or auditory difficulties, as well as those with intellectual disabilities (MoE, 2018a).

In the subsequent years, specialised government institutions were created to support individuals with disabilities (Al-Mousa, 2010), with special education field expanding particularly quickly from 1995, considering other types of disabilities, such as autism and emotional disorders (Battal, 2016; Al-hano, 2006). Saudi policymakers have since realised the importance of establishing laws and policies to ensure that SEN people receive adequate special education services (Aldabas, 2015). The ‘System for the Care of the Disabled in the Kingdom’ was established in 2000 to ensure that individuals with disabilities receive support in fields including health, education, media, sports, employment, training and rehabilitation to facilitate their inclusion in society (Prince Salman Center for Disability Research, 2000).

Special education services have subsequently become more widespread in Saudi Arabia, with the GASE promoting education services for all SEN students through ten main dimensions. The strategy primarily seeks to activate the role of mainstream schools in educating SEN students, as well as expanding the support role of special education institutes (MoE, 2018b). As a result, SEN students are either educated separately in special education institutions or with their typically developing peers in mainstream schools (Al-Mousa, 2010). The distinction is not that clear cut, however. This push to greater inclusivity reflects a shift in the attitudes of the public towards

disability, towards a perspective emphasising the human rights of children that is compliant with the precepts of Islam (Alanazi, 2012). The topic of inclusion is a core issue special education policy in the international context (Cushing et al., 2005). Policy goals in the field of SEN can evolve naturally from discrimination legislation (Aldabas, 2015). The aim of inclusion for children with disabilities in Saudi Arabia is to facilitate the best education in the Least Restrictive Environment (Al-Mousa, 2010; Al-Ahmadi, 2009). The concept of the Least Restrictive Environment originated in the US to describe educational settings, including mainstream classroom with supplementary access to specialist SEN resource rooms, which enable students to participate in the general curriculum and still have their individual needs met. Another educational setting in mainstream schools is for lessons to be provided in separate classrooms, following a more tailored curriculum, with noncurricular activities being shared with mainstream students. This option may be particularly suitable for students with pronounced cognitive difficulties.

The implementation of inclusive education is strongly shaped by the religious-cultural context of Saudi Arabia, with Islamic precepts informing all aspects of life, including teaching and learning. Globally, inclusion in most educational systems seeks to maximise opportunities for students of all levels, irrespective of their disabilities, to study alongside their typically developing peers (Eleweke and Rodda, 2002). This closely complies with Islamic principles that oppose any discrimination based on differences in race, colour, language or ability (Al-Jadid, 2013). In contrast, prior to Islam, individuals with disabilities were prejudiced against due to the perception that their weaknesses were shameful (Al rubiyea, 2010). The principles enshrined in the Qur'an and Sunnah have fostered the rights of SEN people in Saudi Arabia, including their right to education and protection without prejudice (Al-Aoufi, Al-Zyoud and Shahminan, 2012; Al-Ahmadi, 2009).

However, there appears to be a gap between inclusion policies and the actual practices in Saudi Arabia, as evidenced by the large number of students especially those with severe disabilities who have not had opportunities to communicate with their typically developing peers (Alquraini, 2012). Many education professionals in Saudi Arabia, such as teachers and school principals, also continue to display negative attitudes towards students with SEN (e.g. AL-Kahtani, 2015; Alothman, 2014; Al-Mousa, 2010). Disabled students in Saudi Arabia are primarily judged based on their impairments, with disability perceived as deviation from normality, with even the GASE attempting to define students with SEN as ‘abnormal’ (MoE, 2018b). This limited view of disability seems to be shaped by the traditional collective and conservative cultural values of Saudi Arabia.

Despite global advances in SEN provision and the positive support of Islam in the development of special education provisions for students with disabilities, the contradiction between these positions and individual beliefs, especially those shaped by the collective and conservative culture, still profoundly influence the acceptance or rejection of SEN students (Al-Aoufi, Al-Zyoud and Shahminan, 2012). Fundamentally, the culture of Saudi society strives to ensure a rigid homogenous system of rules through familial responsibilities (Al rubiyea, 2010), with individuals being expected to collaborate with their relatives in upholding family values and norms. Those who deviate from familial norms to pursue their individual aims lose access to support from their family members (Patai, 2002), with those who lack the skills to actively support their relatives being considered a burden on their families, which historically resulted in many people with disabilities being marginalised or even killed (Al-Jadid, 2013; Al rubiyea, 2010). Such attitudes can place considerable pressure on SEN people to serve their community in return for support, potentially undermining the valuing of difference, meaning that SEN people are typically excluded and stigmatised in the collective

tradition because they do not conform to social values and norms (Alanazi, 2012). This position has been supported by a number of researchers, who stress that people with disabilities are more likely to be excluded within collective cultures and conservative ideologies due to the pressure of conformity and their reliance on the group to survive, rather than displaying competence within the community (e.g. Meyer, 2010; Brandes and Crowson, 2009; Coleridge, 2000).

Inclusive practices in Saudi Arabia are also influenced by the contradictions between actual Islamic precepts and their interpretations in practice (Al-Aoufi, Al-Zyoud and Shahminan, 2012). While western countries largely understand inclusion as being a right for people with disabilities, the Saudi perspective is that inclusion is charity or welfare. This approach has been criticised for replacing the notions of equality and human rights by depicting people with disabilities as weak and always needing support from others (Islam, 2015). Islamic precepts, as illustrated in the Qur'an and Sunnah, stipulate the right of all individuals to learn and practice their daily activities, irrespective of their advantages or development. Nevertheless, the typical Saudi approach is to offer care for individuals with disabilities as part of the fulfilment of religious obligation, in order to receive rewards from Allah, rather in recognition that all people are inherently equal, irrespective of their differences.

In 2001, with the intention of supporting disabled children and students to adapt into society, the GASE instituted the Regulations of Special Education Institutes and Programmes (RSEIP). The RSEIP originated from “the Education for all Handicapped Children Act (EHA) 1975 and Individual with Disabilities Education Act (IDEA) 1990” (Alquraini, 2011, p. 150). These regulations created the policies and privileges that provide special education programmes and specialised provisions to students with varied disabilities (Aldabas, 2015), including those with specific learning difficulties (SpLD).

The policy states that the learning resources room in mainstream schools is the preferred location for the provision of educational services to students with SpLD. The RSEIP also requires every student with SpLD to be provided with an individual educational programme (IEP) (Alquraini, 2011), which it defines as “a written description of all educational and support services required to meet the needs of each student with SEN (on the basis of the results of diagnostics and measurement) and prepared by the IEP team at the school” (MoE, 2001: Article 84). Article 84 of the RSEIP explicitly enshrines the privileges accorded to students with disabilities, stipulating that the IEP should guarantee the provision of suitable education for those students deemed to have special needs. According to Article 85, every student with SEN should have an IEP, based on clear diagnosis and measurement, irrespective of the challenges involved in its design or delivery, such as scheduling or logistics. The IEP should be implemented by the IEP team comprised of all stakeholders, such as educators and family, in accordance with the educational programme (MoE, 2001).

However, despite the effort to develop policies to support students with SpLD, the delivery of suitable courses for these students remains challenging in Saudi Arabia. There are four main reasons for this, the first of which is that policy reform in the kingdom is slow. The policies of the RSEIP only include services for SpLD students in primary school, despite the fact that SpLD programmes were expanded in 2004 to include middle and high school stages. Available services for middle and high school students with SpLD were first stated in 2011, in ‘The Guide to Specific Learning Difficulties Programs in Middle and High School Stages’ (GSpLD) (MoE, 2011a).

Another challenge to the development of policies is the lack of clear explanations for key items in the relevant laws and regulations. For instance, the GSpLD can be interpreted differently by various readers because it only provides general information about the key terms and work procedures and

lacked sufficient details that help teachers understand their roles in supporting SpLD students. For instance, the guide stated that one of the roles of SEN teachers is to identify students with SpLD without indicating the types of diagnostic measures to fulfil this role. This lack of clarity can also obscure follow-up procedures and accountability systems.

Gaps also exist between announced policies and the actual implementation of regulations. The effectiveness of the RSEIP policies have been limited by a lack of experts capable of performing diagnostic tests and insufficient assessment tools to identify educational settings that meet student needs (Aldabas, 2015). There has been a systemic failure to implement the IEP policy stated in the RSEIP, leading the needs of individuals with SEN in Saudi Arabia to be neglected (Hanafi, 2005). Furthermore, the provision of support to students with SEN has been limited by the implementation of the RSEIP document policy without consideration of the profound cultural and contextual differences between Saudi Arabia and the US, from which it was borrowed (AL-Kahtani- 2015). This highlights the shortcomings of 'borrowing policy' from other countries and implementing without adapting them. The most important of these differences include disability awareness, the status of SEN teachers, the level of collaboration among SEN teachers and other school staff, levels of parental involvement, and school building and class size. They are also related to the lack of accurate data on disability support and service development, limited experience in translating commitments into action, the focus on care over inclusion, and poor coordination mechanisms in related sectors in Arab countries, including Saudi Arabia (WHO, 2011).

Finally, access to quality education for disabled people is hindered by limitations in teacher knowledge and therefore their ability to effectively implement education laws. Despite legislation mandating the education of students with disabilities, it cannot be assumed that teachers in Saudi Arabia

are aware of government regulations. A recent study by Murry and Alqahtani (2015) found that the knowledge base of pre-service teachers was poor, despite most believing in the rights of students to be educated in their classrooms. In Arab countries, the majority of teacher training for special education does not focus on continuous professional development (CPD), collaboration, or other key professional standards (Hadidi and Al Khateeb, 2015).

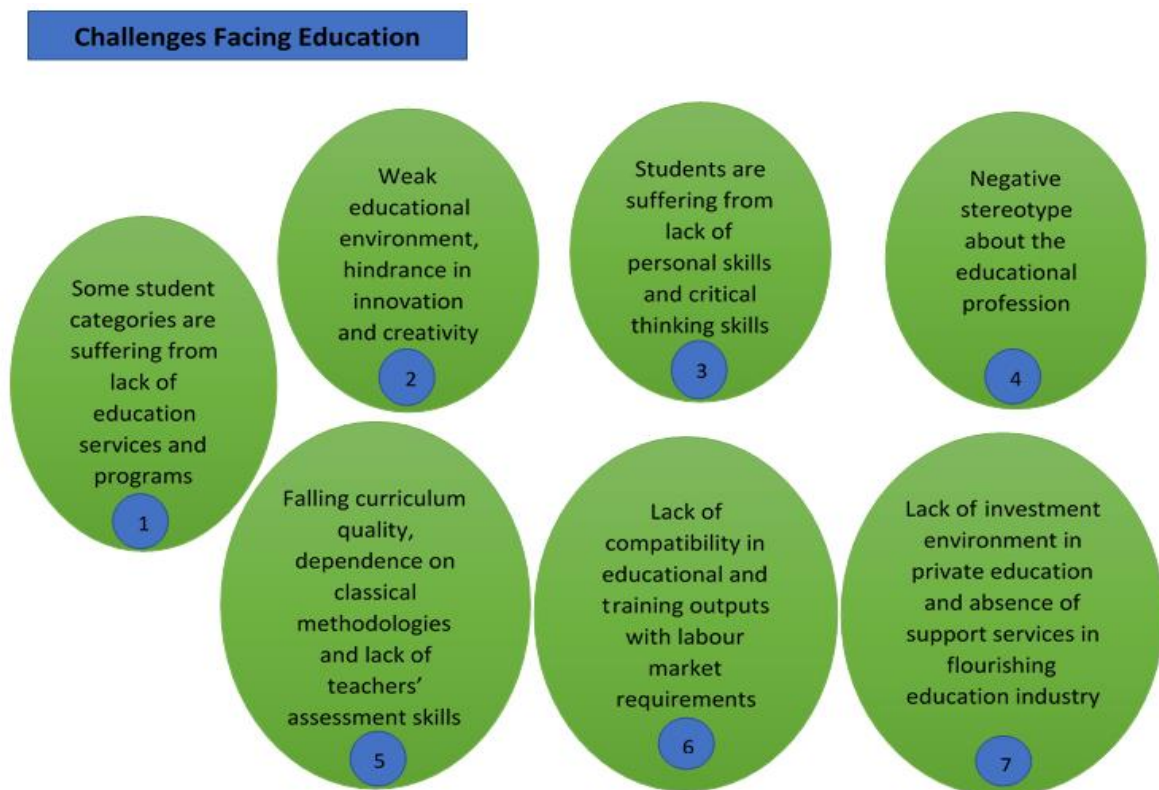
2.4.1 Peer tutoring policy within the cultural and religious context of Saudi Arabia

This section addresses the viability of implementing PT policy within the kingdom, looking at its potential advantages within this specific Islamic cultural context and the particular challenges facing its implementation. Passive learning, repetition and rote memorisation remain important in the Saudi education system (Hamdan, 2014). However, there have been some promising signs in terms of the adoption of global developments into the national education system. Technological developments have led to new approaches, forcing policymakers to carefully consider emergent issues and encouraging the Saudi government to recognise the need for the expansion of education provision to integrate more effective teaching methods (Abu-Arrad, 2004). This can be seen in debates about replacing, or accompanying, direct instruction with methods based on discussion, guided discovery and active engagement with the educational process. The MoE have committed to revising the curriculum and empower students to innovate and to engage with their own self-learning (Abu-Arrad, 2004). These objectives advanced in February 2007, with the King Abdullah Project for the Development of Public Education, which sought to develop the skills teachers need in the areas identified by UNESCO (2007): increasing class participation; updating instructional strategies and shifting classroom focus to small group work.

This recent shift reflects a social constructivist perspective, which makes learners central to the educational process, with learning being enabled through social interaction.

More recently, Prince Mohammad bin Salman introduced the 2030 vision to make education a tool of empowerment to overcome the challenges facing the education system in Saudi Arabia (see Figure 2.3).

Figure 2.3 Challenges to the Saudi education system



(Source: MoE, 2017)

The 2030 vision attempts to improve the current educational system by following five steps (MoE, 2017):

1. Build curriculum philosophy and policies, and link them to teacher development programmes;
2. Introduce learner-focused teaching methods that build skills, develop personality, instil confidence and encourage creativity;
3. Create stimulating, learning-oriented school environments linked to full-service support systems;
4. Deliver inclusive education for people with special needs, including appropriate support;
5. Ensure and expand pre-primary education opportunities, providing nurseries and kindergartens and activating their association with the education system.

In addition to the expansion of SpLD programmes to include middle and high school students, these proposals have enabled Saudi policymakers to recognise the challenges inherent in providing special education services in mainstream schools. Even the most superficial mainstreaming will require modifications of classrooms, textbooks, instructions, and the curriculum (Alquraini and Gut, 2012). This has resulted in the concept of PT being officially introduced to Saudi middle and high schools through the GSpLD (MoE, 2011a), which seeks to encourage greater levels of collaboration between special and general education teachers.

The notion of PT is intimately connected to the aims of the 2030 vision, particularly regarding the shift from teacher-centred to student-centred approaches. Various studies assert that a key limitation of the Saudi education system is the dominant role of teachers and the correspondingly passive role of students during learning activities (e.g. Aldahmash, 2016; Mansoor, 2016; Alhaidari, 2006). PT has the potential to profoundly affect the dynamic

relationships between teachers and learners by moving the authority, currently held extensively and sometimes exclusively by teachers, and sharing it among all classroom participants. This removes the teacher as the basis of all classroom learning (Nawaz and Rehman, 2017), instead enabling the acquisition of knowledge “to take place in a more democratic learning community” (Fougner, 2013, p. 494). Students in PT environments act as the teacher and are given more room to take some control of their own learning (Lueg, Lueg and Lauridsen, 2016; Austin, 2008). This shifts the role of teacher towards that of a facilitator of students’ work (Buraphadeja and Kumnuanta, 2011), as well as requiring careful planning of learning activities (Ayvazo and Aljadeff-Abergel, 2014); fostering students’ engagement, modelling appropriate interactions (Carter et al., 2015); and evaluating the overall development of students (Cervantes et al., 2013).

This change may also affect the curriculum philosophy and policy, as stated in the first aim of the 2030 vision. This is because the shift in the authority of teaching would require the adjustment of curriculums to accommodate and foster the active role of students in the classroom. In fact, one of the main challenges facing the implementation of the aims of the 2030 vision is that of low quality curriculums, which are focused on fostering traditional teaching methods, rather than seeking creativity and innovation (MoE, 2017). However, Khalifa (2011) claimed that the use of lecture-style is unavoidable in situations where the curriculum expects teachers to convey large quantities of information. This is the case in Saudi Arabia, where the school curriculum is extremely intensive, especially given the tight time schedules (Khalifa and Alshehri, 2016; Almadhy, 2012). This pressure can severely hinder creativity among students (Davies et al., 2013), which is an aim of the 2030 vision. While active student interactions during PT can play an important role in fostering creativity, such as through generating solutions and testing hypotheses, this can be difficult to achieve without making appropriate

changes to the duties and workloads expected of teachers (Wang and Murota, 2016). For this reason, effectively implementing students-centered approaches like PT would require a change in the philosophy of curriculum design, enabling more learning activities to be incorporated that give room for student interactions and group work. Successful programmes would also require policies to establish teacher development programmes that equip educators with the knowledge and skills required to implement PT and other teaching approaches that expand the role of students in the classroom.

The 2030 vision aims to provide appropriate, inclusive support for people with SEN also closely aligns with PT, because this approach is an effective way to enhance inclusion in Saudi Arabia. Unlike traditional teacher-centred approaches, many of which limit student contributions, the individualised nature of PT can offer opportunities to meet the individual needs of SEN students in mainstream classrooms, and increase unity among students by encouraging cooperation. According to Worley and Naresh (2014, p. 29), PT provides “a judgment-free environment”, since the closeness of students enables those with learning difficulties (LD) to accept their weaknesses and request help. Additionally, PT may be a way to encourage a transition from a deficit model, predicated on expert intervention, to a socialisation model based on notions of justice and equity. This can be achieved by focusing on the strengths of SEN students and providing them with opportunities to support their peers by playing the role of tutors. Topping (2005) explains that, in this way, PT can help to minimise the stigma associated with being in need by providing equal opportunities for student interaction. Empowering SEN students to take responsibility for their own learning and enhance the learning of their peers is likely to foster discussion and examination of productive pedagogies concerned with notions of fairness at individual and societal levels (Avramidis, 2005).

The introduction of peer learning activities and greater student cooperation into the instructional design may be complex, requiring a great deal of trust between teachers and students (DeVries, 2001). Nevertheless, student input can make collaborative approaches more effective and appropriate for local needs. The customary respect accorded to educators in Saudi Arabia may make adjustment difficult for teachers and students, however,

...one of the chief obstacles is the difficulty in overcoming the entrenched culture of schooling. The predominant images of being student and teacher can best summed up by the medieval monastery rule, 'it belongeth to the master to speak and to teach; it becometh the disciple to be silent and to listen' (Gordon, 2005, p. 14).

Resistance to new pedagogical strategies can be anticipated given Saudi Arabian traditions in education, such as strong teacher leadership and autonomy.

Official Saudi policy only provides a single example of one possible format of PT, namely,

[an] academic intervention which aims to ensure that a well-performing student can help and teach his or her low-performing peer in the same classroom; the classroom teacher should identify the academic skills and provide educational materials (MoE, 2011a).

This definition does not offer clarifications regarding the responsibilities of tutors and tutees, or any insight into requirements and qualifications, or even guidelines for establishing PT programmes. This policy even suggests that SEN teachers should learn more about PT, "by referring to the scientific books and references" (MoE, 2011a, p. 17).

It is important to stress that the concept of PT is radically different from the approaches that have been classically implemented in Saudi classrooms. This difference is likely to result in misconceptions about the goals, effectiveness and implementation of this method, potentially leading to resistance among educators (Thompson, 2011). Some teachers may have intractable opinions about their role, or feel that new alternatives provide poorer quality education, perhaps informed by unidirectional perspectives on learning. This would be a serious impediment to the adoption of communicative approaches (Thompson, 2011), despite the strong evidence that peer support enables quality instruction and problem-solving. Nevertheless, designing schools around students rather than teachers can be challenging, requiring the translation of beliefs into a real world context (Darling-Hammond, Friedlaender and Snyder, 2014). Three kinds of support are available for the implementation of student-centred approaches:

Funding policies that shape what resources are available and how they are used, human capital policies that influence teachers' and school leaders' capacity to enact student-centered practices, and instruction and assessment policies that impact what is taught and how student learning is measured (Darling-Hammond, Friedlaender and Snyder, 2014, p. 5-6).

In summary, this section has outlined the main limitations in the policies established to provide support for SEN students, including those with SpLD. It has also discussed the ways in which the policy of PT and the vision 2030 can overlap and support each other. The following section furthers this discussion with an examination of the key theoretical perspectives underpinning PT: cognitive development theory and social constructivism theory.

2.5 The Effectiveness of Peer Tutoring for SEN Students

Any teaching approach must have a degree of perceived effectiveness in order for teachers to be willing to use it in their classrooms (Thompson, 2011). However, despite the relatively extensive literature on the effectiveness of PT as a tool to support SEN students, few studies have specifically examined its applicability for students with SpLD. This section therefore seeks to evaluate the effectiveness of PT regarding the academic and socio-emotional development of students with SEN, including those with SpLD. In order to comprehensively examine the topic, the unique mechanisms of this strategy are also discussed, in terms of its potential advantages over traditional classroom teaching approaches.

2.5.1 Peer tutoring and academic development

There have been more than four decades of research into PT (e.g. Maheady and Gard, 2010; Topping, 1996; Cohen, 1986; Ehly and Larsen, 1976), the majority of which has been conducted in the US and the UK. To date, most PT programmes have sought to enhance the academic achievement among mainstream students (Karagiannakis, 2008). However, this approach is also effective in improving the academic performance of students with a range of SEN in terms of specific skills, such as mathematics or reading, and behaviour, such as academic participation.

2.5.1.1 Reading skills

The first key to academic success for middle school students is reading proficiency (Alzahrani and Leko, 2018; Tsikalas, 2012), because of the increased expectations on middle school students to master language and acquire sufficient reading skills, which enable them to extract meaning from their learning contents (Edmonds et al., 2009). However, studies have shown

that SEN students often find it more difficult to meet reading expectations than those without learning disabilities (e.g. Cortiella and Horowitz, 2014; Hayes, 2012; Berkeley, Mastropieri and Scruggs, 2011). This has led to extensive research being conducted into evidence-based practices, including PT, that support literacy among SEN students.

Various reading skills have been extensively studied in PT literature, including reading comprehension, reading fluency and vocabulary acquisition skills. The most recent review of reading comprehension skills was conducted by Alzahrani and Leko (2018), who confirmed the positive effects of PT through the investigation of 10 PT interventions with secondary school SEN students. Studies have shown that participation in PT activities strongly correlates to increased reading comprehension skills (e.g. Grünke and Leidig, 2017; Tsikalas, 2012; Calhoon, 2005; Scruggs et al., 2001). PT has also been found to be effective in improving the reading fluency of students who have disabilities or reading difficulties across various age levels (e.g. Decker and Bugghey, 2014; Marr et al., 2011; Wright and Cleary, 2006; Vaughn et al., 2000). Furthermore, students who participate in PT programmes tended to develop a richer vocabulary, as well as being better able to understand and utilise words correctly, as well as to generalise what they have learned in other contexts (Wood, Mustian and Cooke, 2012; Mackiewicz et al., 2011).

The positive impact of PT on the reading skills of students with LD has been associated with three main aspects of this teaching strategy. First, PT increases opportunities and time for practice among learners and active involvement in reading activities (Hayes, 2012; Archer and Hughes, 2010). According to Bryant et al. (1999), a lack of active engagement in reading activities is a key reason for limited vocabulary acquisition among students with disabilities. This was supported by Calhoon et al. (2007), who suggested that PT doubles reading practice time, which increases time on task and builds

reading fluency. Second, the effectiveness of PT has also been related to the positive learning environment which is established during PT activities, largely as a result of the extra support available to participants, with peers offering instant, constructive feedback (Spencer, 2006). In order to investigate this issue, Wexler et al. (2015) synthesised 13 PT interventions for students with academic disabilities in grades 6-12. They found improved reading comprehension and content mastery, particularly when feedback was integrated into the programme. Immediate feedback and error-correction is instrumental to effective classroom instruction (Villareal, 2013), particularly for weaker readers (Rupley, Blair and Nichols, 2009). Conversely, interventions are less effective when the feedback is not immediate (e.g. Dufrene et al., 2010), or when it is compromised by poorly paired PT groups (Wexler et al., 2010). The reciprocal nature of PT can maximise benefits for both students (tutors and tutees) by allowing progress assessment and mutual feedback (Marr et al., 2011). Third, the modelling of reading skills by tutors can help students with SEN to correct their reading mistakes, potentially increasing their reading fluency. While classroom teachers usually provide the most accurate reading modelling, the effectiveness of hearing proficient models and perception of self-efficacy may be adversely affected when the gap in competency is particularly pronounced (Decker and Buggey, 2014). In these scenarios, such as with students with SEN, it can be more effective to receive modelling from individuals of a similar ability level, especially when they are also similar in terms of age, experience or interests, as is likely with student peers (Murphey and Arao, 2001).

Despite the positive effects of PT on reading skills, Wexler et al. (2010) claimed that this approach is ineffective for students with severe reading difficulties, although this may be attributable to the particular PT model tested, which focused on opportunities for reading practices without direct teaching on vocabulary acquisition skills or comprehension development

practice. Additionally, many of the studies investigating this strategy implemented PT alongside other teaching techniques, such as story mapping (Grünke and Leidig, 2017), audio prompting (Mackiewicz et al., 2011) and comprehension strategies (CSR) (Vaughn et al., 2000). The presence of multiple strategies can make it difficult to identify which techniques resulted in reading improvement or whether PT would have had similar efficacy if implemented alone.

It is important to note that while PT has certain inherent limitations and might not be effective for all SEN students (McMaster, Fuchs and Fuchs, 2007), this approach is not intended to replace the role of classroom teachers. Indeed, the main aim of PT is arguably to provide opportunities for students to practice, supporting the work of classroom teachers rather than providing a means to teach new material, which is still the job of the classroom teacher (Hayes, 2012). In essence, PT is an additional teaching technique that is relatively easy to implement, cost effective and can provide individual support to meet the various learning needs of students in the same classroom (Alzahrani and Leko, 2018; Grünke and Leidig, 2017; Mackiewicz et al., 2011). Nevertheless, the effectiveness of this approach relies upon teachers responding to the needs of individual students by establishing clear objectives, assessing their progress, amending PT activities to fit their various learning styles, and even modifying the length of the programme as necessary (Hayes, 2012; McMaster, Fuchs and Fuchs, 2007).

2.5.1.2 Writing skills

Writing is an important skill for success at school and professional career. Despite its importance, many students struggle with writing competence, in large part due to the requirement to activate various cognitive processes in the production of written text, such as planning, organising ideas, expressing thoughts, typing and revision (Koster, Bouwer and Bergh, 2017). These are

often more challenging for students with learning disabilities than typically developing students, because of difficulties in planning, spelling or finding the words needed to complete long sentences (Broc et al., 2013; Karande, Sholapurwala and Kulkarni, 2011; Graham and Harris, 2007).

Many researchers have proposed PT as an effective method for improving the writing skills of students with LD, because of increased time spent on writing tasks and the additional opportunities to practice (Grünke et al., 2017), which is especially important for students with SEN (Viel-Ruma, Houchins and Fredrick, 2007). The interaction between peers also play a key role in improving writing skills among SEN students, as these activities provide opportunities for modelling, scaffolding or collaborative text production (Berninger et al., 2002). The individualised nature of PT activities is also vital for overcoming writing difficulties, especially when some classroom teachers focus on teaching practical writing skills like spelling and neglect other cognitive processes, such as planning and organising ideas (Dockrell et al., 2015). This is especially worthy of consideration when teaching students with SEN, given their potential array of difficulties with writing, meaning that personalised tuition, such as through PT, may be the most effective way to meet their individual needs in diverse classrooms (Grünke, Janning and Sperling, 2016). This argument was supported by Kotsopoulos (2008, p. 3), who implemented a PT programme called “Promoting Achievement and Success at School (PASS)”, which was developed for secondary level students with SEN. PASS showed pronounced development of writing skills, as well as supporting academic and social development through individualised instruction. Individualisation, as offered by PT, is invaluable to students with LD in improving their knowledge acquisition, with tutors tailoring instruction to the specific academic and personal needs of their tutee, such as their information processing speed. This approach can empower

students to ask questions, in addition to providing specific and private explanations and feedback (Graesser and Person, 1994).

Further empirical studies have investigated the effects of PT on the writing skills of students with LD. For instance, Grünke et al. (2017) conducted a study to investigate the impact of using a story map within PT activities on fourth grade students. They found that the writing performance of participating students increased, empowering them to produce longer, higher quality stories. Although this outcome may be at least partially due to the story map technique within PT activities, the researchers attributed improved performance to the collaborative relationships in which students produced their narratives, which increased engagement with the task and therefore motivation. These findings were echoed in their previous study with third grade students, in which students produced longer stories after their participation in PT. The researchers stated that this indicates that PT allowed students to practice complex cognitive skills, such as planning and revising (Grünke, Janning and Sperling, 2016).

Other studies have examined the impact of CWPT on spelling accuracy among primary school students with SEN (Burks, 2004; Taylor and Alber, 2003). The implementation of CWPT were shown to yield improved spelling performance, as measured through increased numbers of correctly spelled words. Similarly, Hughes and Fredrick (2006) examined the impact of CWPT on vocabulary acquisition and spelling performance among middle school students with LD, by training students to use a strategy called constant time delay, which is “a systematic procedure that provides models of the correct response until the student can respond independently without the model” (Hughes and Fredrick, 2006, p. 2). After participation in the intervention, students demonstrated improved performance, as well as self-reporting positive feelings towards cooperation and a sense of belonging to a team including typically developing peers. The opportunity to collaborate seemed

to encourage students to engage more actively in the writing tasks, with teachers noting that students demonstrated improved confidence and communicative ability after their participation.

2.5.1.3 Mathematical skills

Low mathematical performance is another major challenges facing students with learning disabilities, given the greater probability that they will experience difficulties in following counting principles, understanding abstract concepts, mastering arithmetic facts and solving mathematical problems (Rotem and Henik, 2015; Watson and Gable, 2012; Rousselle and Noël, 2007; Geary, 2004). The complexity and variety of these difficulties has led some to argue that traditional, teacher-centric fact-focused teaching methods do not meet the students' needs (Holecek, 2012), leading to extensive investigation of the mathematical problems facing students with LD in mainstream classrooms (e.g. Hord et al., 2016; Waiyakoon, Khlaisang and Koraneekij, 2015; Krawec et al., 2012).

PT is a potentially effective way to overcome poor mathematical skills among students with LD. A synthesis of 12 studies conducted between 1997 and 2007 to investigate the effectiveness of PT on the academic achievement of middle and high school learners with LD across various subjects found that this approach improved academic outcomes (Okilwa and Shelby, 2010). The researchers stated that PT is a viable mechanism to enable students with SEN to learn effectively in mainstream classes to succeed through collaboration with others. Similarly, Holecek (2012) used cross-age and cross-disability tutoring to investigate the benefits for peer in a middle/high school programme for students with EBD. The findings indicated increased participation and higher scores in mathematics, suggesting that PT may increase involvement and facilitate learning in key educational areas for students with EBD. Students also became more motivated to attend

mathematical sessions and collaborate with their peers. This view was supported by Calhoon and Fuchs (2003, p. 235), who investigated the effect of an intervention based on the use of PT, which was assessed using “curriculum-based measurement (CBM)”. The intervention was effective in improving computational maths skills and motivation to study maths among secondary school students with learning disabilities.

However, studies into the use of PT with middle school students with SEN have identified considerable limitations with this approach. For example, Eckhart (2010) examined the impact of PT on multiplication facts among twelve middle school students with maths deficits, all of whom reported that PT made the process easier, which was verified by improvements in correct answers in multiplication testing. However, no functional relationship was proven between total correct multiplication facts from self-study and from PT. Nevertheless, evidence showed that active involvement, instant correction and positive reinforcement improved maths competencies (Eckhart, 2010). In a more recent study, Jo (2015) found that participation in CWPT improved the academic performance of middle school students with EBD. However, this study relied on a single subject, who was absent during three of the observations, and the study was also much shorter than that of comparable studies, having taken place twice a week for six weeks (Jo, 2015). A longer term research study with more participants may have provided better insights regarding the applicability of SWPT as a viable strategy over longer periods.

Two syntheses of the PT literature revealed that far more studies had assessed the effect of PT on mathematical achievement among primary school students with LD than secondary school students (Wexler et al., 2015; Kunsch, Jitendra and Sood, 2007). Nevertheless, PT is recognised as a promising strategy that increases opportunities for students to practice mathematical skills and receive additional assistance from their peers. This is often

particularly important in secondary classrooms given the large number of students and the demands on teachers to meet the individual needs of students within the limited time available for instruction. Harper and Maheady (2007) suggested that students with LD have a particularly strong need for opportunities to respond and to spend more time on learning materials. However, they often received fewer opportunities than their typically developing peers in many mainstream classrooms (Greenwood, Maheady and Delquadry, 2002) potentially limiting their academic achievement (Eriksson, Welanders and Granlund, 2007). Thus, there is a need to implement different interventions, including PT, in order to maximise the time available for SEN students to process learning materials.

2.5.1.4 Participation and Motivation

The difficulties encountered by students with SEN may not only affect their learning skills, but can also negatively influence their motivation and hinder their participation in mainstream classrooms (Tovli, 2014; Melekoğlu and Wilkerson, 2013; Wendelborg and Tøssebro, 2008; Eriksson, Welanders and Granlund, 2007). PT offers a way to increase attention and motivate students, thereby increasing classroom participation (Bowman- Perrott et al., 2007; Wehby et al., 2003). Arieno (2007) confirmed this position in a study using CWPT in an eighth grade science class of 23 students, who were divided into six groups, each of which had a student peer tutor. CWPT increased levels of support and cooperation, perhaps due to the trusting relationships that developed through collaboration, which helped the class to be more motivated to focus on tasks and, as a consequence, learn more effectively. Additionally, CWPT was found to improve positive classroom behaviour and student engagement, perhaps due to the teacher shifting from a dominant to a facilitation role, enabling observation of ongoing learning and issues to be addressed as they arose. Other studies demonstrated that CWPT is effective

in motivating middle students with disabilities to participate actively in the classroom due to their preference to work collaboratively in teams (String, 2009). This view was supported by Sutherland and Snyder (2007), who tested four middle school students with EBD to assess the effects of RPT on active responding, behaviour and reading fluency. They found that student satisfaction and active responding increased, with students achieving reading growth goals, which was explained by the positive reaction of the students to the chosen intervention components.

Despite these positive results, studies into PT have not been universally successful. Carter et al. (2011) found that the level of academic engagement among students with disabilities remained unchanged after participation in PT. This may have been due to the training provided to SEN and mainstream teachers, the planning process, the curriculum or the learning and monitoring strategies used during PT sessions. The effectiveness of PT in promoting engagement in students has been linked to a number of factors, such as the ability of peer tutors to focus tutees and prevent distraction (McCurdy and Cole, 2014); the use of praise between peers, the willingness to accept feedback and corrections, the provision of more opportunities to practice, and the design of learning materials are also important considerations in ensuring student engagement during PT activities (Bowman-Perrott, Greenwood and Tapia, 2007); and even the use of multiple tutors to each tutee (Carter et al., 2005). Further research is required to determine whether altering the number of peer tutors could further increase levels of active involvement.

In summary, the empirical studies in this section demonstrated that PT can have a range of positive effects in core subjects (reading, writing and mathematics), as well as enhancing student motivation and participation. However, it is important to reiterate that PT is intended to supplement rather than replace classroom teachers. PT helps teachers to meet the individual needs of SEN students within inclusive classrooms by increasing practice

opportunities, providing immediate feedback and motivating them to work collaboratively with their peers. Additionally, although PT has been examined in conjunction with a wide range of disabilities, it is the role of teacher or PT facilitator to design activities that fit with the individual needs of each student.

2.5.2 Peer tutoring and socio-emotional development

PT encourages students to participate in teaching and learning. It also offers valuable opportunities to practice social skills such as interaction skills, communication, listening, or requesting and delivering assistance, as the people that a young person spends time with can profoundly influence their own behaviour. Due to the influential role of peer relationships on adolescents, it is important to understand the effects that these relationships have on the socio-emotional development of students. PT is intrinsically connected with peer relationships and, as such, has been found to be effective in building social and supporting emotional development.

2.5.2.1 Promoting Inclusion and Building social connections

The growing number of students with disabilities receiving special educational services within inclusive settings (Garrote, Dessemontet and Opitz, 2017; Odluyurt, Tekin-iftar and Ersoy, 2014) necessitates care to ensure they receive the best opportunities to interact with their peers and improve their social skills. According to Carter and Hughes (2005), there are two main reasons for middle school students with learning disabilities continuing to face difficulties in terms of interacting with their peers. First, there is a lack of social interaction skills among SEN students, including those with intellectual disability, autism and SpLD (e.g. Koster et al., 2010; Pijl, Frostad and Flem, 2008; Thomas and Smith, 2004; Leffert and Siperstein,

2002; Tur-Kaspa, 2002). Weak social skills create challenges for middle school students, who need to build close friendships by engaging in complex interactions requiring reciprocal interactions, exchanging ideas, and sensitivity (Bierman and Montminy, 1993). The second factor is related to the school environment and classroom context in middle schools (Carter and Hughes, 2005). Without a well-planned intervention, physical presence in mainstream classrooms will not increase the opportunities for children with SEN, particularly those with severe disabilities, due to infrequent interactions among SEN students and their peers (Brock and Carter, 2016). Given the complexity of middle school versus primary school curriculums, teachers are more likely to use direct instruction or lecture style, further hindering opportunities for student interaction (Carter and Hughes, 2005).

PT can be a powerful way to improve social skills and enhance social interactions between SEN students. PT can be effective in enhancing social interaction skills among middle school tutors and tutees with emotional disorders (Blake et al., 2000). This supported the findings of studies that showed that peers can offer the appropriate, natural support required by students with severe developmental disabilities (Villa et al., 1992), through increased social interactions and the formation of new, positive friendships at school (Carter et al., 2013). Additionally, CWPT activities can help students with disabilities to teach each other social approval skills and decrease social disapproval behaviours (Lawson and Trapenberg, 2002).

The use of PT is also effective in enhancing inclusive practices among students with and without LD. This is important because PT can alleviate the common perception among at-risk students that they do not belong within the school community (Robinson, Schofield and Steers-Wentzell, 2005; Nazzari, 2002). For example, tutors can enhance social interactions between students with LD and their peers. A critical analysis by Carter and Hughes (2005) examined 26 peer-support arrangements based on the work between students

with intellectual disabilities and their typically developing peers in middle and high school classrooms. These interventions were shown to be highly valuable in increasing social interactions among SEN students and their typically developing peers. Further empirical studies confirmed the validity of PT in establishing social relationships among SEN students and their typically developing peers in mainstream classrooms (Brock and Carter, 2016; Loizou, 2016; Copeland et al., 2004). Involvement in PT may also benefit mainstream students, by helping them to develop their skills such as empathy, improving their attitudes towards others and enabling them to forge new friendships (Carter et al., 2011). Jones (2007) studied this issue in terms of a PT programme in which mainstream students served as tutors for students with autism. Participation was shown to be effective in fostering caring attitudes and increasing disability awareness among mainstream students.

PT fosters classroom community by encouraging higher levels of peer-to-peer communication and imitation than classic teacher-to-peer interactions (Thompson, 2011). Social relationships are as important for students with disabilities as any adolescent. PT therefore provides an invaluable function in helping teachers to support the integration of students with disabilities into a shared school community (Carter et al., 2013). As PT is based on student participation, it can help to foster collaboration, shared responsibility and commitment among students, which are some of the most important aspects of classroom community (Meltzoff, 1994). The involvement of peers also offers a number of important benefits in comparison to adult-directed interventions (McCurdy and Cole, 2014). For example, peers are available to give support across most relevant school settings (Hoff and Robinson 2002). Peers can also affect student behaviour and, as they are present throughout the day, can help the maintenance of positive behaviour, or serve as a visible reminder (McCurdy and Cole, 2014; Hoff and Robinson, 2002). In addition, peers can help to alleviate the burden on the teacher, by providing assistance

to a student with SEN, which frees the teacher to focus on meeting other students' needs. This can be highly effective in terms of both the costs and time allocated to teaching (Christensen et al., 2004; Hoff and Robinson 2002).

2.5.2.2 Supporting emotional development

Another important outcome of PT is the emotional support and development of students with SEN, such as improving their confidence and self-esteem. Hughes and Fredrick (2006) investigated the implementation of CWPT among sixth grade students with learning disabilities and found that they not only improved their vocabulary skills, but also increased their confidence. Retention of learned skills was better and the students were also more excited to receive support from their peers than in traditional teacher-directed activities. This finding was supported by Algozzine et al. (2009), who examined the effect of PT on reading fluency among second grade students who were at risk of developing serious reading difficulties. In addition to significant growth in reading fluency, students also demonstrated increased confidence in their ability, manifested in more frequent attempts to read books during their free time and to read aloud in the classroom, as well as willingness to improve their reading skills to become tutors and support others.

This opportunity to play the role of tutor has also been associated with promoting confidence. For instance, Arieno (2007) investigated the use of CWPT with eighth grade students with learning disabilities during science classes. She found that not only CWPT was effective in promoting tutees confidence, as a result of the increased opportunities to receive additional assistance and encouragement from their peers, but it was also effective in boosting the confidence of tutors, who benefited from the feeling of subject mastery that arose from participation in PT. This was supported by Burns (2006), who found that tutors and tutees gained confidence and skills during

a structured PPP reading programme for students with moderate LD in a special school environment. Jones (2007) explored this topic at primary school level, studying the impact of PT on mainstream peer tutors who were paired with tutees who had autism and associated LD. PT was shown to provide direct benefits to tutors, in terms of building their confidence and encouraging them to display teaching responsibility, suggesting that making children feel useful and responsible in a position of authority is intrinsically motivating to student tutors and leads to increased confidence.

PT activities can also be effective in improving self-esteem among students with LD. In a study of middle grade children with limited English proficiency, Montecel, Supik and Montemayor (1994) found that many students gained self-esteem and positive attitudes toward school. Further empirical studies supported this finding, indicating that PT is a promising strategy for improving self-esteem and fostering positive attitudes among students who have, or who are at risk of having LD (Darrow et al., 2009; Nugent, 2001). A more recent study of students with autism in a mainstream secondary school found that PT increased self-esteem and social satisfaction, while also reducing bullying (Bradley, 2016).

The influence of peers on students' confidence and self-esteem has been asserted by some researchers. For example, Humphrey (2003) argues that children indirectly build a picture of themselves from the perceptions of others, such as parents, teachers and peers, with peer influence becoming especially pronounced as they grow and enter school, due to the time spent together, the numerous interactions between pupils, and the emotional relationships that shape these interactions (Kindermann, 1993). Because of this, peers can be a valuable way to help students adjust and cope with their difficulties (Hartup, 1992). This is extremely important for students with LD, such as dyslexia, who tend to perceive themselves as different because of their learning impairments (Humphrey, 2003). Tutoring sessions can enable

students with LD to have opportunities for social interactions that they might not normally have during traditional teaching instructions (Carter et al., 2011). If planned and supervised systematically, these interactions can allow tutors to model appropriate behaviour, as well as provide feedback and reinforcement, thereby promoting the desired behaviour among SEN students. The one-to-one support provided by peers allows students to receive additional assistance that meets their individual needs, potentially helping to increase their feelings of competence and thereby improving their self-esteem (Miller, Topping and Thurston, 2010; Topping, 1996).

It is important to note that the choice of peer partners, which is always a key aspect of PT, is particularly important with respect to socio-emotional outcomes. The results of PT can be adversely affected by high levels of disagreement, poorly phrased critical statements, or the tendency among some tutors to provide intense, complex instructions that can be difficult to follow (Murphy, Faulkner and Farley, 2014). There are many potential obstacles for students with LD in PT, including problems with expressive communication skills and certain learning behaviours, like effective questioning (Wood and Algozzine, 1994), or difficulty in remembering or expressing concepts, especially with an audience (Schott and Windsor, 2000). Murphy, Faulkner and Farley (2014) found that students with autism showed a higher tendency than students with average or high skills to ignore questions and requests from their peers, which reinforces the importance of managing interactions among peers and the climate in which they occur. It may be preferable to prioritise predictability and structure, rather than non-structured, spontaneous social interactions (Bishop and Adams, 1991). Students also need to be trained with the strategies to communicate with their peers of different abilities and needs (Carter et al., 2013).

In summary, in addition to their efficacy in academic development, there is some evidence to suggest that peer networks can be an effective tool to

improve the socio-emotional skills of students with SEN. Through the evaluation of selected empirical studies, this section has demonstrated that PT may constitute a practical way to foster inclusion, build friendships and increase social competencies, as well as promoting confidence and self-esteem among tutors and tutees with a wide range of LD. The following section discusses the factors that can either facilitate or hinder the implementation of PT.

2.6 Factors that Shape Peer Tutoring

PT can be shaped by numerous factors, including: training (e.g. Cervantes et al., 2013; Holecek, 2012; Fitch and Semb, 1993); planning and supervision (e.g. Carter et al., 2013; Schneck, 2010; Miller, 2005); physical environment and resources (e.g. Carter et al., 2013; Topping, 2005; Sheldon, 2001); and collaboration between professionals (e.g. Carter et al., 2015; Thompson, 2011; Sheldon, 2001). Given the influence of these factors on promoting and enhancing the development and implementation of PT, this section examines each in turn.

2.6.1 Training

Tutor training is generally considered essential in successful PT activities, in order to ensure the competency of tutors in teaching, guiding and supporting SEN students (Cervantes et al., 2013; Holecek, 2012). Bentz and Fuchs (1996) investigated the effects of tutor training to deliver PT in mathematics and found that properly trained tutors exhibited more helping behaviours than untrained controls. It is therefore possible that insufficient training of peer tutors might adversely affect PT activities, such as tutors who erroneously assume expertise in all disciplines or teaching language (Back, 2016). In this case, a lack of training could result in less interactive language, such as longer

talk-times and closed questions, thereby increasing peer tutor dominance offering fewer opportunities for tutee engagement (Roscoe, 2014; Thurston et al., 2009).

However, little research has been conducted into the effectiveness and applicability of different types of tutor training (Barron and Foot, 1991). This issue could be related to the lack of detail about training reported in PT research, which may have hindered researchers from comparing the training quality utilised by different programmes (Robinson, Schofield and Steers-Wentzell, 2005). It is clear that most PT studies integrated multiple training sessions for tutors into their interventions prior to their participation in PT activities (e.g. Ansuategui and Miravet, 2017; Hsiao et al., 2015; McCurdy and Cole, 2014). However, little information was generally provided on the training protocols used in these studies, such as how tutors were trained to offer help, to provide feedback and to encourage their peers. It is also important to consider that the type and quantity of training can vary depending on the complexity of learning content, as well as the age and ability of students (Villareal, 2013; Miller et al., 1993). This consideration can be seen in the practice of Ayvazo and Aljadeff-Abergel (2014), who trained third grade students on the use of one tutoring skill per training session, whereas older students in eighth grade were trained in two tutoring skills per training session. This was because the researchers believed that younger students are typically slower to gain fluency in the kinds of skills most useful in tutoring.

Despite the lack of numerous, comprehensive examples, it is clear that a number of components should be considered in the design of tutor training programmes to support SEN students. First, tutors should be made aware of the nature of the disabilities of their peers, in terms of their difficulties and strengths (Houston-Wilson et al., 1997). This will help participating students to avoid misunderstanding the capabilities of their peers and help the tutor to provide the support that students with SEN need to tackle their unique

problems. This includes providing tutors with communications techniques that can be used to support SEN students, such as sign language, gesture, photographs, or even technological devices, such as iPads (Cervantes et al., 2013). Second, tutors should be aware of the objectives of the PT activities and the specific skills that their peers need to acquire in order to fulfil their individual needs (Worley and Naresh, 2014; Brewer, Reid and Rhine, 2003). Third, training should equip tutors with a range of viable teaching strategies (Sheldon, 2001), particularly those that have been proven to be most effective with SEN students, such as story mapping (Grünke and Leidig, 2017); pause, prompt and praise strategies (Merrett and Thorpe, 1996); and the least prompts strategy (Hudson, Browder and Jimenez, 2014). Tutors should also be given opportunities to practice instructional techniques, such as demonstrating, modelling, explaining, providing examples, and requesting and providing feedback (Cervantes et al., 2013; Holecek, 2012; Roscoe and Chi, 2007). Fourth, tutors need to learn reinforcement techniques that can be utilised to support and encourage active participation from SEN students (Houston-Wilson et al., 1997), such as praise, awarding points and positive feedback. Fifth, the role that tutors play in monitoring their peers' progress should be clarified and reinforced (Hott, Walker and Sahni, 2007), such as by teaching them to ask questions to check understanding. Finally, teachers should ensure that tutors have sufficient time to practice the above skills, while monitoring them to ensure proper training (Karcher, 2007).

Many researchers emphasise the value of providing sufficient training for tutors, as opposed to training both tutors and tutees, irrespective of the evidence that suggests that neither always understand the roles involved in PT. Both participants in a PT partnership should be trained prior to the commencement of any programme or activities (Colvin and Ashman, 2010; Colvin, 2007). Successful interactions and self-efficacy require both parties to understand and agree on their roles and responsibilities (Storrs, Putsche

and Taylor, 2008). This is even more important for SEN students (Cervantes et al., 2013), who often need training in assertiveness to ensure that they ask for help when required (Bentz and Fuchs, 1996).

For greater effect, PT programmes should be considered at the stage of pedagogical strategies for teaching a curriculum subject (Thurston et al., 2007). However, this can be complicated by the fact that many teachers feel insufficiently able to meet the various needs in their classrooms, including disability (Vaughn et al., 2000; Mastropieri and Scruggs, 1997). There may therefore be a case for ensuring the design and delivery of continuing professional development programmes intended to enhance the pedagogy that underpins peer-learning for teachers. Implementing PT requires teachers to fulfil multiple roles, including setting aims, selecting subjects or learning skills, training participants, supervising student interactions, and assessing programme outcomes (Villareal, 2013). Teachers need training in validated inclusive practices that are practical to implement and benefit their students, while ensuring the delivery of the curriculum (Fisher et al., 1995). This is essential in the Saudi Arabian context, in order to maximise access to inclusive education. University courses and practical experience should prepare Saudi teachers to include students with disabilities in their classrooms, thereby fostering successful inclusive and supportive atmospheres (Murry and Alqahtani, 2015).

2.6.2 Planning and supervision

The research indicates that PT can be an effective classroom strategy that leads to improved student functioning and achievement. However, this approach requires careful planning prior to implementation. Miller (2005, p. 26) recommends incorporating ten aspects into a PT plan:

- Clarifying objectives, which informs all subsequent decisions;

- Selecting target curriculum area;
- Selecting and pairing students;
- Selecting tutoring techniques;
- Selecting materials;
- Defining the classroom rules and procedures, and systems of reinforcement;
- Training students, either individually or in small groups. This can take place before or after school, during breaks or free time, or on an in-service day (Houston-Wilson et al., 1997);
- Determining the monitoring and assessment techniques for the tutoring process;
- Determining how to evaluate the programme and assess student learning; and
- Deciding how student feedback will be provided.

A PT plan for students with SEN should consider setting objectives that are consistent with those stated in the individualized education program (IEP) for each student (Block, 2007). It should also consider how individuals with disabilities are expected to participate, the supports provided by tutors, and the ways the teacher can enable student cooperation (Carter et al., 2015). Timing and logistics are also almost important considerations. This can include the amount of time required for providing training to tutors and the fact that this might be affected by the type of disabilities of the tutee (Houston-Wilson et al., 1997). For example, tutoring students with ADHD might require more planning time, because tutors will need to learn how to increase their attention through varied instructional techniques, such as speaking using different volumes and tones, or dividing classroom tasks into simple steps to limit distraction.

There is no universally agreed level of planning and structuring for PT activities (Iwata and Furmedge, 2016). Excessive structure could limit thinking and learning and inter-student discussion, processes that are crucial for PT success (King, 1997). Conversely, unstructured tutoring activities can limit the collaborative work among students who might tend to work individually (Topping, 2005; Galton et al., 1999); simply copy their peers' work (De Lisi, 2002); or even engage in activities that only tackle low-level cognitive processes, such as memorising and recalling information (Ismail and Alexander, 2015). This suggests that structured activities are likely to be essential (Flores and Duran, 2016; Blanch et al., 2013) in establishing connections between peers (Hott, Walker and Sahni, 2007; Gillman, 2006) and in fostering dialogued interactions that allow students to collaborate to build meaning and acquire knowledge (Duran, 2010). Thurston et al. (2007) supported this position, claiming that PT programmes can effectively promote achievement through discussions that allow students to jointly construct knowledge and present their thoughts. Effective planning for PT activities should therefore seek to help students to experience interactions characterised by peers actively swapping questions, thoughts and ideas, thereby promoting higher levels of thinking and learning (Ismail and Alexander, 2015). Determining the structure should also involve consideration of the time that students will spend during PT sessions, in order to ensure that learning materials are properly covered and that learning aims are met (Grossman and Rhodes, 2002; Sheldon, 2001).

In terms of supervision, PT relies upon successful relationships between students, tutors, and instructor (Colvin and Ashman, 2010), in which monitoring enables mistakes or omissions by other parties to be resolved. For example, a tutor missing an error may not assist the tutee (Schneck, 2010). Therefore, teachers should supervise PT sessions to optimise student interactions, working as facilitator and monitor. This support role involves

various responsibilities on behalf of the SEN teacher, including relatively close physical proximity, identifying SEN students who can participate in PT, encouraging friendship between typically developing students and those with learning disabilities, modelling appropriate social interactions and offering support when required (Cervantes et al., 2013). As students gain experience, the teacher should reduce direct support, but continue monitoring the interactions to ensure that the PT activities run smoothly (Carter et al., 2015), reinforce good progress (Eskay et al., 2012), and ensure that students remain on-task (Houston-Wilson et al., 1997). Teachers can also provide rewards and incentives, which can be motivating for some students (Robinson, Schofield and Steers-Wentzell, 2005). Finally, supervision allows the teacher to evaluate the progress of the PT programme (Nath and Ross, 2001), monitoring and recording student interactions to inform necessary modifications to the arrangements, such as tweaking groups, preparing additional material, or redefining PT objectives (Sheldon, 2001). Listening to student conversation is a crucial aspect of this monitoring role (Brewer, Reid and Rhine, 2003); particularly when PT is an unfamiliar approach for students who rarely interact with their peers in mainstream classrooms (Ayzavo and Aljadeef-Abergel, 2014). By carefully monitoring and guiding proceedings, teachers are more likely to obtain useful insights on how to tailor future PT sessions to meet the needs of students.

2.6.3 Physical environment and resources

Effective peer support requires the strategy to be accepted by students as a mainstream academic practice (Black and MacKenzie, 2008). However, this requires proper consideration of time, resources and location (Topping, 2005; Sheldon, 2001). It could be difficult for SEN teachers to review PT activities during regular teaching time as this might interfere with the attention and focus of other students in the classroom. In Saudi Arabia, the large size of

classrooms might prevent tutors and tutees from communicating, or hinder effective monitoring of PT activities (Yip, 2004). Therefore, PT might be better situated elsewhere, where observation of the students is viable (Sheldon, 2001).

Once a location is determined, the PT programme will require sufficient resources to enable PT activities. Teachers might select the materials used in mainstream classrooms for teaching academic content during PT sessions. However, certain materials might not be as beneficial for SEN students as for mainstream students (Heron et al., 2006). For example, students with visual impairments might benefit more from audio aids than traditional printed books. These challenges might make it difficult for teachers to find the most suitable materials for their students, or to foster the social and emotional developments of PT groups (Miller, 2005). In these scenarios, the required materials can be created by teachers, which typically yields more methodologically complete materials. Nevertheless, the role of students in re-organising the materials might increase their potential learning and offers them valuable insights into structuring, reviewing and re-formulating class material to present them effectively to the tutee (De Lisi and Golbeck, 1999). Personalised class materials that are designed or selected by tutors can also facilitate learning for their tutees (Flores and Duran, 2016).

Another important aspect for consideration when establishing a PT programme is financial resources. These enable extrinsic reinforcement of student performance through the provision of cash rewards or certification for participation or achieving goals (Topping, 2005). Bowman-Perrott et al. (2013) studied 938 pupils (grade 1-12) and discovered that rewards increased positive academic outcomes. Extrinsic rewards are a useful way to express gratitude to peer tutors for their contribution to the classroom teacher and the overall course (Arieno, 2007). For this reason, the acquisition of special materials or funding to reward students could be an obstacle (Hamm, 2011).

Another important resource that can profoundly affect the implementation of PT is time. Teaching practices should serve the needs of students and the curriculum, but should also consider practical time commitments for teachers (Fisher et al., 1995). As teachers are often under a heavy workload, they are typically more inclined to utilise strategies that do not have onerous preparation requirements (Thompson, 2011; Gersten and Woodward, 1990). Furthermore, successful teaching strategies require adequate preparation, which increases required time and extra, creating many obstacles for teachers (Thompson, 2011), especially with the need to supervise and assess PT outcomes, which also needs time and resources (Hamm, 2011). However, it can also be argued that PT encourages some students to take responsibility for developing targeted skills (Heron et al., 2006), enabling more students to be taught and giving teachers more time to fulfil other commitments (Topping, 1996). In some cases, PT programmes can be started easily, without onerous time burdens (Grünke and Leidig, 2017; Lundblom and Woods, 2012), with carefully-planned programmes having better long-term outcomes and requiring less time for in-course modification or supplementation (Thompson, 2011).

2.6.4 Collaboration between professionals

The degree to which social contextual factors influence tutoring process and outcomes is understudied, perhaps due to the traditional focus on the tutor-tutee relationship as the core mechanism of change in tutoring (Rhodes, 2002). However, tutoring relationships are embedded within the social network of the parties, rather than existing in isolation (Keller and Blakeslee, 2013). This makes it important to consider how tutoring activities are shaped by, and shape, broader social networks and other meaningful relationships between stakeholders.

Mainstream teachers are instrumental in facilitating or hindering PT implementations, so active collaboration between parties can play a vital role in the successful implementation of PT strategies (Sheldon, 2001). The SEN teacher should meet with their mainstream colleagues to explain the intended goals for the peer support provisions, the guidance that will be given to parties, and how they expect the students to collaborate during the programme (Carter et al., 2015; Oortwijn et al., 2008; Rasku-Puttonen et al., 2003). Once a plan is ready for implementation, SEN teachers should share their ideas with mainstream teachers, who may be better situated to identify students to recruit into the PT programme. Mainstream teachers can be responsible for implementing PT programmes, as well as improving relationships between participating students by helping them to understand one another (Carter et al., 2013).

There may be reluctance among mainstream teachers regarding the implementation of PT programmes, perhaps due to feeling threatened, perceiving the need for a peer tutor as an indication of class teacher not being successful (Thompson, 2011). Teachers might also resist the implementation of PT for various reasons, such as their belief that students lack the competence to play the role of a teacher (Gordon, 2005). Definitions of competent teaching may also differ between special educators, who concentrate on meeting the needs of individual pupils, and general educators, who typically focus on whole-class needs, assessment criteria, and the needs of the curriculum (Vallecorsa, DeBettencourt and Zigmond, 2000). As a consequence, the specific needs of an individual student would be balanced against those of the group, with the chosen instructional methods, pacing, and assessment tools effectively being determined by the needs of average students (Maheady et al., 2001; Vallecorsa, DeBettencourt and Zigmond, 2000). Clarity is essential in this matter, because a lack of understanding of the benefits of PT for both SEN and mainstream students can cause teachers

to resist the adoption, ultimately leading to the failure of PT programmes (Carter et al., 2013).

The implementation of PT can also be enabled by headteachers, who must grant permission for new programmes. The participation and support of headteachers and school administrators can affect the success of peer relationships in a school, such as by enhancing positive peer classroom interactions, encouraging the implementation of PT (Carter et al., 2013). In addition, they can shape the settings of tutoring activities, student meetings and offer guidance to PT facilitators, as well as support in overcoming logistical challenges or suggestions on maintaining curricular focus (Sheldon, 2001). Therefore, the potential benefits and relative simplicity of PT strategies should be emphasised during initial meetings with headteachers and school administrators.

School counsellors also play a key role as PT coordinator in monitoring and supporting tutoring relationships, providing feedback or information, as well as helping participants to solve problems, and giving insights into communication techniques, time management and stress reduction (Gillman, 2006). Counsellors are an important part of special education teams in inclusive schools in Saudi Arabia, with important responsibilities for monitoring student achievement and behaviour. They should take the necessary measure to identify talented students and support slow learners, ensuring their access to specialists, as well as to ensure clear communication between all teachers (MoE, 2001: Article 51). Studies have shown that school counsellors can play a successful supervision role in PT interventions, ensuring that tutors deliver interventions reliably and effectively, and that tutees acquire and maintain the skills included in their individual educational plans (IEPs) (Odluyurt, Tekin-iftar and Ersoy, 2014).

Finally, SEN supervisors have not been explicitly studied in terms of their impact on PT programmes. They play an important role in training SEN teachers or PT facilitators, and helping teachers overcome problems with school staff and administrators. As part of their stated role, SEN supervisors are expected to classify students, based on their age, disabilities and educational environment. They should follow-up this evaluation to ensure that they meet their fullest potential, contributing to the preparation of lesson schedules, supervising SEN teachers and holding regular meetings with the teaching staff. SEN supervisors should also evaluate and develop the performance of SEN teachers, supervising the implementation of all policies received from the Management of Education and the GSpLD, as well as participating in all necessary research, studies, seminars and training courses (MoE, 2001: Article 32). It might be worth stating that these responsibilities make it clear that SEN supervisors ought to be proactively involved in SEN provision.

2.7 Conclusion

The chapter has explored teaching and learning in the context of Saudi Arabia. The discussion has focused on how the national education system has been shaped by certain Islamic principles and traditional Saudi culture, which is highly collective and associated with the family values. Despite the effort undertaken to develop and implement policies to support students with SpLD, considerable challenges remain in providing appropriate special education services to students in Saudi Arabia. The evaluation of PT policies also revealed a lack of clarity about the training, resources and collaboration required in PT. It also suggests that effective introduction of PT may shift classrooms from teacher-dominated to a focus on student facilitators.

This review uncovered that the meaning and perceived benefits of PT vary according to different theoretical perspectives on child development (i.e. cognitive development and social constructivism theories). Types of PT were critically examined, especially in terms of student interactions, with empirical studies noting that PT is effective in improving engagement, off-task behaviour and social skills, as well as academic achievement in core subjects, including reading, writing and mathematics. The evidence suggests that PT fosters inclusion and supports emotional growth by increasing self-esteem and confidence.

The considerations influencing the implementation of PT were discussed, with the most important factor being training, which improves student interactions and work output quality. Properly trained tutees understand their roles and feel comfortable asking for assistance, thereby improving learning outcomes. Additionally, peer learning strategies benefit from teachers receiving ongoing professional training courses, which improves the effectiveness of planning and supervision in facilitating PT implementation, with related factors (primarily time constraints) hindering its efficacy. Improved access to physical and financial resources may improve PT implementation, although ensuring effective collaboration between involved parties, including SEN teachers, mainstream teachers, school principals, school administrators and SEN supervisors, would facilitate the delivery and effectiveness of PT.

Several gaps in the knowledge of PT were identified in the literature. Despite the richness of the extant international literature on PT, the majority of these studies focus on examining the effectiveness of PT programmes using experimental, quantitative designs that measure students' improvement before and after participation in PT. These quantitative studies have revealed that participation in PT can develop reading fluency (e.g. Marr et al., 2011), text production (e.g. Grünke, Janning and Sperling, 2016) and mathematical

skills (e.g. Eckhart, 2010) among students with LD. These developments have been primarily associated with the individualised nature of PT that allow tutors to meet the individual needs of students with learning difficulties, and to the increased opportunities for students to participate in learning activities and gain immediate feedback from peer tutors. However, there is a lack of studies which investigate the perceptions and experiences of students with LD regarding PT.

In addition, the majority of the studies on SEN focused on the academic benefits of PT, with less attention given to socio-emotional benefits like increased confidence and self-esteem. A relative shortage was also identified in the use of PT to support SpLD students, especially in middle school. Few studies have considered the training protocols used to provide tutors with the skills to support and engage with SEN students to maximise their experiences from PT. A gap also exists regarding the influence of the physical environment, such as classroom layout and educational resources, on the implementation of PT with SEN students. Additional gaps were identified in the knowledge of collaboration between stakeholders (SEN teachers, mainstream teachers, SEN supervisors, school counsellors and headteachers) or implementation of PT within inclusive schools.

A distinct absence was noted of studies of Saudi Arabia, particularly the utility of PT in this context for individuals with SEN, including SpLD students. Despite the importance of students' perceptions in educational change, and notwithstanding the efforts of the MoE, there is little evidence that the opinions of students with SEN have been considered in educational provision, possibly due to the role of parental authority in collective societies. Finally, the majority of Saudi studies are quantitative perhaps due to the perception that interpretative qualitative studies are less rigorous and reliable. For example, Albajhan (2008) conducted a study to examine the impact of PT on improving mathematical skills among mentally disabled students in a

separate classroom in a mainstream school in Alahsa. The findings revealed that PT was effective in improving mathematical skills for three out of four disabled students in the experimental group, due to the help provided by peer tutors (mainstream students) based on their tutees' learning levels within a supportive and stimulated reinforcement. Another quantitative study was conducted by Alharthy (2007), who evaluated the effectiveness of peer tutoring in supporting acquisition of functional words among students with moderate mental disability who received SEN provisions in a special education school in Riyadh. The findings revealed that mentally disabled students managed to support their peers in acquiring functional words, but some students needed more PT sessions to achieve the desired result. Despite these positive results, there remains a lack of in-depth qualitative investigation informed by the perspectives of students and teachers, resulting in a correspondingly limited understanding of PT in the specific cultural and religious framework of Saudi Arabia.

As such, the current study seeks to contribute to the gaps identified above, focusing on:

- a) Examining understandings and practices of PT in the specific religious-cultural context of Saudi Arabia from the perspectives of teachers, students and supervisors. The perspectives of pupils were valid for a number of reasons. Students participation is invaluable in inclusive schools, as it is instrumental in the development of communication skills, self-esteem and student relationships (Rose, 1998), as well as fostering a more positive school ethos (Quicke, 2003). Finally, given their involvement in the process, children offer valuable insights to education that can be extremely different from those of adults (Greig and Taylor, 1999).

- b) Exploring the perspectives of students, teachers and supervisors in terms of the effectiveness of PT in supporting the academic and socio-emotional development of students with SpLD.
- c) Deepening the understanding of the factors that facilitate and hinder PT, including physical environment and resources, training, collaboration between professionals, planning, and supervision. Policymakers and administrators may be particularly interested in the research outcomes, given the implications of these findings for the organisation and implementation of PT.
- d) Offering a qualitative study in a context that is dominated by quantitative studies and, as such, providing new perspectives. Adoption of AT as a lens through which to view the research problem granted valuable insights into the perspectives of the participants and where appropriate, the researcher, developed through observation, analysis and reflection.
- e) Offering a practical example of an approach to research triangulation that is not commonly used in studies in the Arab world, with data being corroborated through the comparison of findings from semi-structured interviews, observations, and document analysis.
- f) Informing future interpretive studies in education, particularly those wishing to employ AT as a framework. This approach is especially uncommon in research conducted in Saudi Arabia, and no previous study has utilised a similar approach to explore the topic of PT.

Chapter Three Methodology

3.1 Introduction

This study aimed to explore the implementation of PT policy in six middle schools for girls in Saudi Arabia through the views of stakeholders. It investigated the perceptions of teachers, supervisors and students regarding the use of PT to support SpLD students. It also examined the factors that facilitated or hindered the successful implementation of this teaching method. The specific research questions generated by these aims were:

1. How is PT perceived and used to support students with SpLD within the cultural and religious framework of Saudi Arabian middle schools?
2. What are the perceptions of teachers, students and supervisors of the effectiveness of PT, in terms of enhancing the learning experiences of students with SpLD?
3. What are the perceptions of teachers, students and supervisors regarding the factors that facilitate or hinder the implementation of PT for students with SpLD?

To understand the nature of PT teaching and learning, this study utilised AT as a theoretical framework through the lens of constructivist epistemology, in an attempt to understand the objectives and learning outcomes of PT activities, actor engagement and the influence of resources, rules and local culture on the implementation of this approach. AT informed the entire research methodology: the research paradigm and design, population and sampling strategy, and methods and procedures for collection and analysis of data. This chapter also discusses the steps taken to ensure trustworthiness in qualitative research, to address issues with translation (i.e., semantic

equivalence), to comply with ethical standards, and to factor the positionality of the researcher into the research design.

3.2 The Theoretical Framework for the Research: Activity Theory

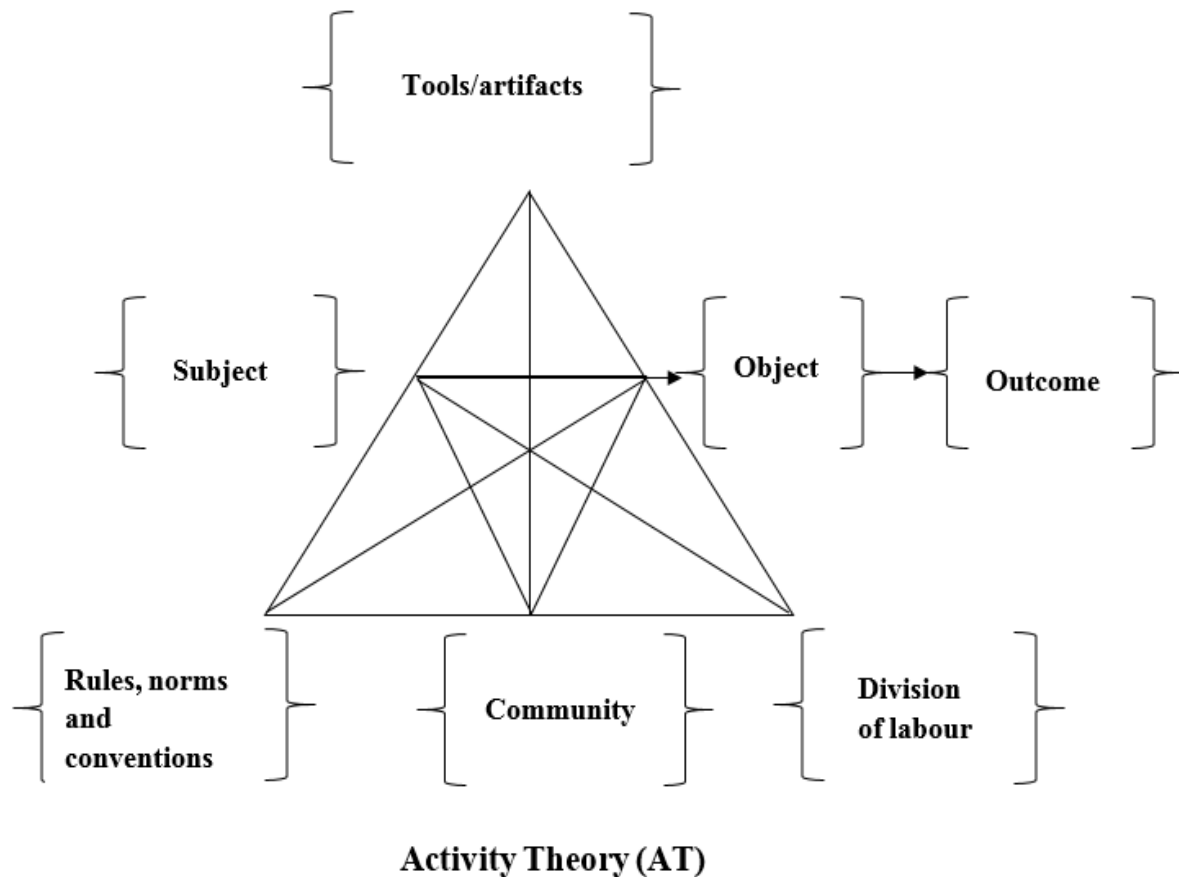
The theoretical framework that was chosen to underpin this study into the perceptions of PT practice was Activity Theory (AT), which is intimately linked to the theories of Vygotsky (1978) and Leont'ev (1981) (Hardman, 2008). AT accepts that cultural and social context is instrumental to the cognitive development of children (Asghar, 2013), based upon the notion that properly understanding human behaviour requires consideration of the context. As human activities are typically 'collective endeavours' that occur over long periods of time (Lofthouse and Leat, 2013, p. 11), they are therefore strongly influenced by contemporary and historical factors (Hassan, 2013). For instance, teaching practices are likely to be profoundly influenced by context, including the historical approaches used to deliver knowledge.

This study sought to examine the perceptions and experiences of participants regarding the implementation of PT activities. As discussed in the literature review, implementing inclusive approaches that are sustainable and effective requires consideration of numerous ranges of complex factors that can create tensions among the intended purposes and the actual practices of PT (Sindelar et al., 2006). These include the preparation of students and teachers, policies and guidelines, individuals' and societies' beliefs about diversity, as well as availability of resources and the level of collaboration among practitioners. Tensions can also arise from the diverse perspectives and understandings generated by people who influence the process of tutoring SpLD students, such as teachers, supervisors and mainstream students. For example, while SEN teachers might understand PT as beneficial in the support of the academic and socio-emotional development among SpLD students,

mainstream students might perceive that PT is only effective in the promotion of academic development among SpLD students. Additionally, while supervisors might understand that PT is a viable strategy with which to supplement to the role of teachers, teachers might instead perceive PT as an alternative to their own role. These differences illustrate the importance of exploring and reporting the various perspectives and dimensions of different tutoring experiences during the implementation of PT programmes. Chen (1990, p. 45) supported this argument, asserting that “the worthiness of a programme is difficult to judge without having information on the contextual and/or intervening factors that help to make that programme a success or failure”. This requires the adoption of an appropriate theoretical framework that is capable of accommodating these multiple factors and perspectives. One such framework is AT, which operates by analysing context and activities simultaneously (Yamagata-Lynch, 2010), based on the assumption that learning activities differ in a complex, real world environment as opposed to controlled settings.

This study adopted the second generation of AT proposed by Engeström (1987) (see Figure 3.1). The unit of analysis was the PT activities undertaken in the schools, where mainstream students were working to support SpLD students.

Figure 3.1 Activity system model



(Source: Engeström, 1987, p. 78)

Socio-cultural theories like AT can be an effective alternative to outcomes based approaches, which focus on anticipated outcomes, as they enable the investigation of educational interventions in context and the recognition of unexpected consequences to produce practical, significant outcomes (Bennett, Flynn and Kelly, 2015; Swanwick, 2005). This theory was chosen because it not only facilitates the examination of the outcomes of PT activities, but because it can also depict the connections and relationships between the various aspects of social systems as they fulfil their goals (Pearson, 2009), enabling it to function as a thinking tool. This enabled the

investigation of other contextual dimensions that might influence the implementation of PT in a Saudi school, such as the level of collaboration among community members in which PT took place, including mainstream teachers, SEN supervisors, headteachers and school administrators. Another contextual dimension could be the physical environment and tools used to support SpLD students during PT activities, such as classroom size and layout, technological devices and other educational aids. AT also provided a more complete exploration of PT practices by investigating the influence exerted by stakeholder relationships over these practices, thereby giving valuable insights into the complexity of classroom practices and experiences. This highlighted implicit practices to inform the structure of future PT programmes.

As “human activity is object oriented, mediated by tools and socio-culturally situated” (Vygotsky 1978, p. 598), AT states that each activity is conducted by a person (*subject*) who has a particular motivation or aim (*object*), operating in a setting that contextualises the activity, eventually leading to a result (*outcome*) (Bennett, Flynn and Kelly, 2015). Other aspects of the environment, such as cultural or social factors, also influence the activity. Objects are ‘collective motivations’ that provide meaning for actions, rather than being discrete tasks or objectives (Lofthouse and Leat, 2013, p. 11). In this study, the subjects were teachers and students (tutors and tutees) who were actively participating in the implementation of the PT programmes. The main object was the academic, social and emotional development of students with SpLD, although other objects included the personal motivations of individuals, such as tutors who wanted to serve the community or improve their own skills or teachers who sought to reduce their workload. The PT activity facilitated numerous outcomes, including greater student learning or engagement, as well as improving their confidence, self-esteem and communication skills.

In AT, those undertaking an activity work towards their goals by using (*tools*), which can be material or abstract. Subjects use these tools to fulfil the aims of the activity. Physical objects may be mediated by physical tools, whereas abstract objects require abstract tools, including frameworks, plans and language. Essentially, tools shape human perception and allow interaction with, or shaping of, the world. In this study, tools or mediating artefacts were both internal (psychological) and external (material), including language. They were also formal tools, including presentation opportunities and official tutorial support, and informal tools, such as quizzes casual classroom conversations. For instance, dialogue opportunities with both tutors and peers served as an effective tool for enabling constructive feedback and avoiding misconceptions from unidirectional transfer of information.

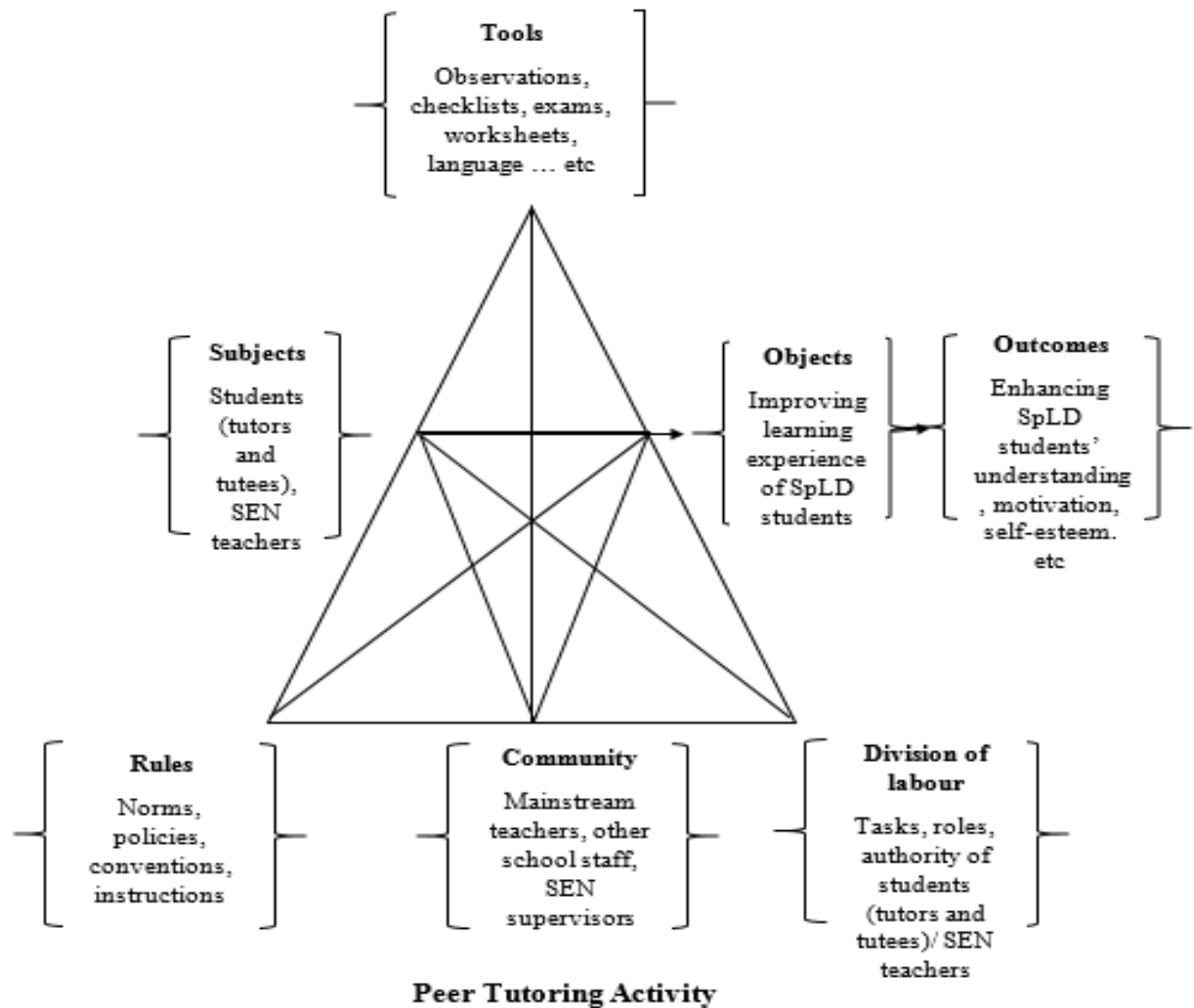
Human actions within AT terms are examined in terms of the roles and responsibilities (*division of labour*) that enable successful completion of the activity. In the current study, division of labour or roles refers to both horizontal (e.g. from classroom teachers to students) and vertical power relations (e.g. from tutors to tutees) (Hardman, 2008). AT identified the varied roles played by tutors and tutees during PT sessions, illustrating the importance of teachers' awareness of the various subject positions and the various implications for active or passive learning (Asghar, 2013). It could also include the roles of staff responsible for the implementation of PT programmes within school settings, such as headteachers and school administrators.

The focus on (*community*) was particularly important for understanding PT. In this context, community was comprised of the teaching faculty of a specific school, or even the entire educational community. These communities are constructed through shared language and tool-using activities. For this reason, when a new teaching method is introduced, it can change the practice of a community and therefore the social contact that occurs, as well as associated

values or perspectives. This applies to communities in a regional or national sense, as well as communities of practice (CoP), like the SEN supervisors, mainstream teachers and other school staff studied in the current research.

AT was also useful in understanding how policies and guidelines, as well as implicit understanding of the nature of teaching and learning (*rules*), shape human actions within the activity. Rules in PT can include norms and cultural conventions, such as perceiving classroom teachers as the main source of information and perceiving SEN students as always being in need of help from more capable peers. In addition, these rules can include educational policies and school guidelines for teaching SEN students in general and for implementing PT in particular. The subjects, objects, division of labour, tools, community, rules and outcomes of PT activity are outlined diagrammatically below (see Figure 3.2).

Figure 3.2 Activity system model of peer tutoring



(Source: adapted from Engeström, 1987, p. 78)

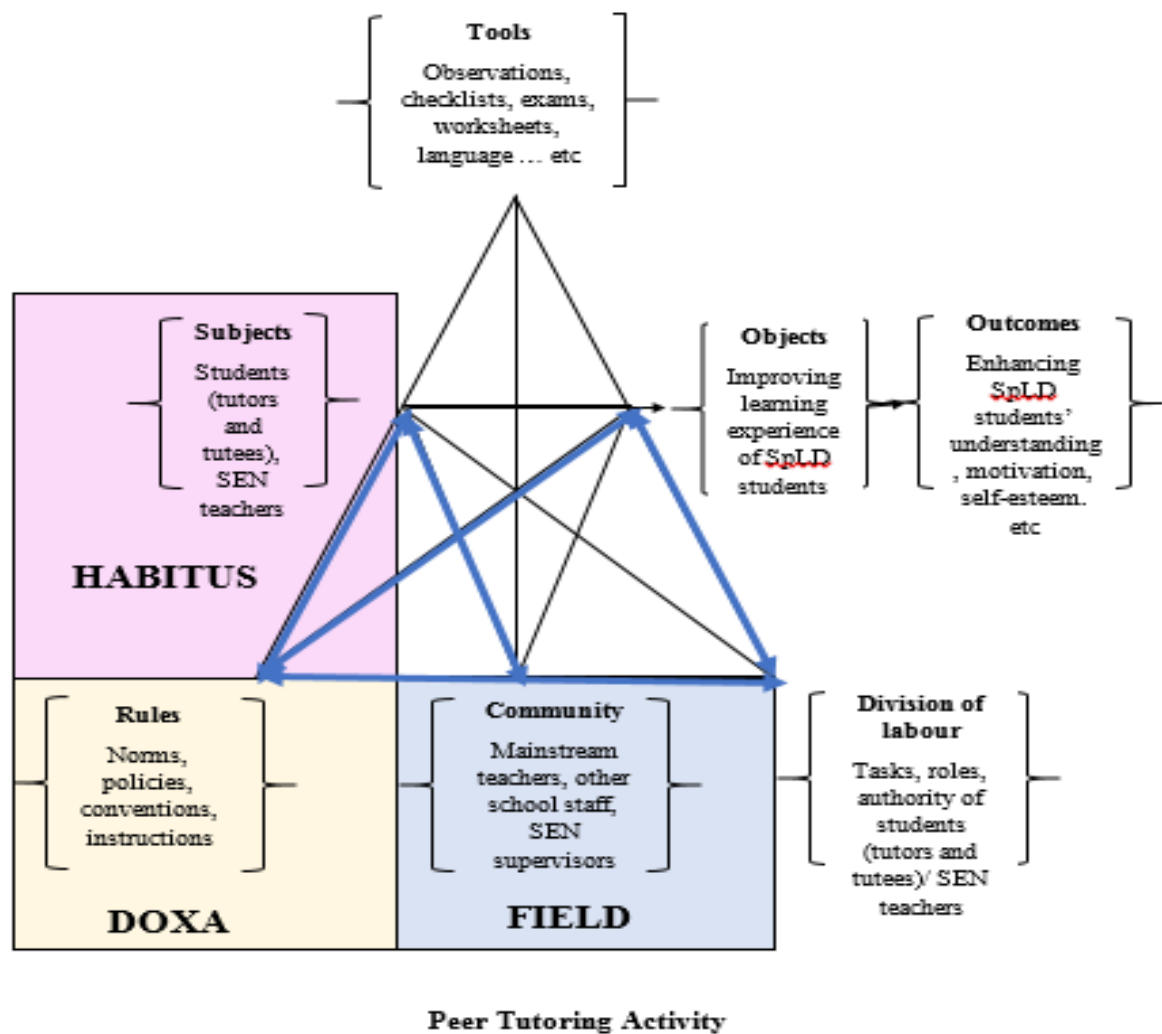
This model provides an explanation of the PT activities that were implemented in the schools as an activity system. More precisely, AT analysis of PT enabled the investigation of different organisational issues, such as

roles, rules and resources connected to the issues associated with a lack of suitable educational aids, time and physical spaces assigned to tutoring, in keeping with the focus on logistics. It also identified the understandings and values held by the participants of a given PT programme. This provided useful insights into the perspectives of teachers regarding the efficacy of tutoring in facilitating the development of students and meeting the needs of the curriculum. AT was also useful in illuminating the role of power in tutoring, manifesting in the control exerted within hierarchical systems between teachers and students, as well as between policymakers and teachers. This situation might occur when PT outcomes challenge existing policies, which typically perceive SEN students as passive recipients of the support provided by their teachers, as well as neglecting the voice of teachers in the reformation of current teaching practices.

AT was suitable for the nature of the current research, as it provided a systematic approach to examine perceptions within the specific culture of the context, as illustrated in the theory of practice (Bourdieu, 1990) on PT. AT perceived learning as a social process rather than as “a purely internal psychological event” (Niewolny and Wilson, 2009, p. 21). Therefore, multiple views and traditions can largely influence the expected outcomes of PT for SpLD students. According to Rivera et al. (2002), AT enables researchers to examine the interactions among individuals who can possess a wide variety of skills, specialisms and abilities that develop within the context in which the learning activities occur. This can be achieved through an exploration of the understandings and values held by teachers and students (*subject*) and those held by the SEN supervisors (*community*) regarding the implementation of PT, as well as examining the cultural conventions and policies that influence PT practices in Saudi Arabia (*rules*). In other words, it is possible that PT practices are hindered by the belief in the dominance role of teachers (*doxa*), which were held by many participants in this study. These

values might work against change by fostering many aspects of the banking system (Freire, 1970) and the perception of students as passive learners, rather than encouraging their active involvement in collaborative activities with their peers. Hence, improving the effectiveness of education processes might require teachers to reconceptualise their beliefs about how learning takes place (James, 2006). Rules might also require educators to comply with official policies, professional standards or the regulatory frameworks of a specific institution, which could reduce creativity in the design of PT (*habitus*). For instance, policies that require teachers to deliver curriculum content in a limited timeframe might hinder their ability to activate the role of students, especially in large classrooms or with particular intense subject matter. The relative influence of different aspects of the theory of practice based on the work of Bourdieu (1990) within the dimensions of AT (Engeström, 1987) is illustrated below in diagrammatic form (see Figure 3.3).

Figure 3.3 The relationship between the theory of practice and peer tutoring activity



(Source: adapted from Alenezi, 2012, p. 285-286)

This suggests that the ability to change and create among individuals who activate the PT programme (*habitus*) can be affected by their values, norms,

political and cultural conventions (*doxa*), as well as by the level of support provided by the authorities and other individuals who influence the educational provisions available to SpLD students (*field*). The consequence of this is that the authority of knowledge and the relative power in division of tasks and roles played by teachers and students within PT activities are directly influenced by the *doxa* and through the community. Even when the same PT practices are used, differences can be uncovered in terms of the initial aims, the expected outcomes, the nature of student's interactions or the perceived role of teachers and other community members, such as headteachers and supervisors, regarding the implementation of PT, all of which have the potential to change the expected outcomes (Asghar, 2013).

AT has multiple interactions with the concept of CoP. According to Bennett, Flynn and Kelly, (2015), while communities of practice identify how learning occurs among communities with shared practices in a particular field, AT identifies how learning occurs among different activities that are situated in a complex environment. Both AT and CoP emphasise the importance of studying human activity within its context (Arnseth, 2008). Additionally, the concept of CoP enables researchers to perceive learning as “relations among people in activity in, with, and arising from the socially and culturally structured world” (Lave and Wenger 1991, p. 51). In this regard, the structured approach of AT can help the process of uncovering and unpacking the various ways that peers interact with and learn from each other in the context of the activity system of PT. It also offers valuable insights into whether these interactions reflect the notion of CoP through exchanging knowledge, providing support, offering reassuring comments, discussing information and not interrupting each other too often (Guldborg, 2010). AT can also provide an evaluation of the roles and the quality of interactions among teachers, school administrators and supervisors (*division of labour*). In essence, thought can be shaped by interactions with other people, by the

rules of the society in which interactions occur, and the allocation of tasks by the community group (Asghar, 2013; Cole and Engeström, 1993).

Contradictions in AT can also provide insights into why activity systems do not necessarily meet their aims. There are four types of contradiction within a single activity system and between two or more activity systems: primary, secondary, tertiary and quaternary (Engeström, 1987). A primary contradiction might occur within each component of the activity system. An example of this might be when tutors realise that more than one value (aims) can be attributed to their participation in PT, such as gaining rewards from Allah, or the role of supporting peers and collaborating in the classroom. A secondary contradiction occurs when the two components of the activity system conflict with one another, such as when the explanations and support provided by tutors (*division of labour*) conflict with the lack of a physical environment in which to effectively implement PT activities (*tools*). A tertiary contradiction arises in response to the adoption of a more culturally advanced activity, which causes conflict with the dominant activity. This might occur when the adoption of PT to foster collaboration work among students contradicts the current assessment practices, which places more emphasis on the assessment of students' abilities to memorise and recall the information. Finally, quaternary contradictions result from a change to the activity that leads to conflict with related activities (Engeström, 1987). For instance, if the responsibilities for the implementation of PT were shifted from SEN to mainstream teachers, this might create conflicts with the traditional teaching activities provided in mainstream classrooms.

In summary, the AT concept of learning is that occurs through participation in a social activity, which is situated within historical and cultural contexts (Engeström, 1999), in that learning cannot be separated from the context in which it occurs (Bennett, Flynn and Kelly, 2015). Learning in PT reflects this, especially in the collaboration between students engaged in shared learning

activities. Overall, AT was a useful flexible framework for PT research, because it enables the examination of human interactions and realities in a context of support and development. The implication of this is that AT lends itself to observation of developmental changes in the participants within a socio-cultural research perspective. The following sections discuss the research methodology, methods, data collection and analysis procedures utilised in the current study, as well as the ethical issues that emerged and the positionality of the researcher.

3.3 Research Paradigm (Interpretivism)

There are many world views on the subject of knowledge acquisition. They are collectively known as paradigms (Sedlack and Stanley, 1992). A research paradigm describes a way of framing the researcher's understanding of the world and "how s/he interprets and acts within that world" (Kivunja and Kuyini, 2017, p. 26). A paradigm is a set of beliefs that guides the investigation of the research topic (Guba and Lincoln, 1994); this philosophical standpoint should be suitable for the particular research topic, as well as with the chosen ontology and epistemology used to understand and interpret the knowledge or reality under investigation.

Ontology describes the assumptions of reality under investigation (Scotland, 2012; Denzin and Lincoln, 2000). These can be the assumptions of a given culture or society, of the researcher, or all of these. The current research adopted a 'multi-realism' ontology in an attempt to consider the perspectives of different participants. In this way, it attempted to construct the reality in which PT activities support SpLD students and to uncover those factors that either support or obstruct such actions. By integrating multiple perspectives, this study sought to explore the external and internal meanings of the reality (Cohen, Manion and Morrison, 2011) in which the implementation of PT

occurs. External realities include factors that influence the success of PT, like collaboration between teachers or inadequate equipment. Internal realities include the way that stakeholders understand PT, as these are shaped by perceptions, beliefs or life experiences. In this context, these realities are most often the product of interactions between society and the individual teacher or pupil. For example, personal experiences with friends or family members with SpLD might make a tutor more likely to take a collaborative, rather than linear approach to activities in a PT programme.

Research inevitably involves the values and personal experiences of the researcher (Denscombe, 2010). Therefore, in addition to the different realities outlined above, the current study also considered the influence of the researcher's own experience, as a SEN teacher and later a SEN lecturer. The relevance of this experience to the study context offered the possibility to enrich the data gathered. Although the findings of the interviews were orally summarised and checked by the researcher, with participants being given the opportunity to comment on a written summary, the end results were invariably created through the interaction of these elements and therefore the interaction between the researcher and the researched.

Consideration of the views that different individuals have about reality naturally helps a researcher to measure and understand that reality. This theory of knowledge, in terms of understanding and acquisition of new information, is known as epistemology (Matthews and Ross 2010). Epistemology describes the theory of knowledge utilised to express a certain stance on how one can express beliefs, and the meaning and methods of attaining knowledge (Hartas, 2010). In describing the ways of discovering knowledge or reality, epistemology deals with the nature of knowledge, the interactions between the preferences and assumptions of researchers, and available sources of data. In this, epistemology also refers to data collection methods.

This study adopted constructionism for its epistemological position, based on the notion that the way that a researcher and participants engage with research data or emerge from social situations creates meaning through their multiple realities (Cohen, Manion and Morrison, 2011). Data in a constructionist epistemology are “socially situated” and are strongly associated with the study context (Cohen, Manion and Morrison, p. 137), which refers in social studies to the influence of culture and local context on individuals (Hartas, 2010). In the current study, factual data was supplemented by the diverse perspectives of stakeholders (SpLD students, mainstream students, SEN teachers and SEN supervisors). Using AT as an analytical framework within a constructivist epistemology supported the examination of PT activities by providing an understanding of the culture and social context that shaped the activities, with the data perceived through the lens of the researcher’s personal experience in SEN provision, enabling certain events to be explained from an inside perspective (Denzin and Lincoln, 2000). As constructivists believe that all information is inherently interpreted by a researcher or those involved in the research context, this epistemology was appropriate for examining the unique characteristics of the Saudi Arabia educational context, especially in terms of its complex cultural and religious dimensions.

Given the aforementioned ontological and epistemological stance of this research, it was determined that the most appropriate approach to meet its context-specific aims would be through interpretive, qualitative research. Ontology considers human acts to be inherently explainable and generally intentional (D'Cruz and Jones, 2004), and epistemology states that knowledge is based upon subjective human perceptions of their environs (Blaikie, 1993). Meanwhile, the interpretive paradigm is concerned with understanding the process by which actions occur and the context within which this happens (Denzin and Lincoln, 2000). Social theories hold that people use their experience and expectations to understand situations and construct constantly

evolving meanings, resulting in numerous possible interpretations. The interpretivist paradigm seeks to understand these meanings and the factors that influence them across multiple realities (Denzin and Lincoln, 2000).

This study sought to investigate the different individual perspectives (thoughts and beliefs) that exist regarding PT across selected organisations: namely, the schools (represented by students and teachers) and the MoE (represented by supervisors). The study did not test a pre-existing theory, through experimentation or hypotheses. Instead, it attempted to understand various meanings regarding the intervention, through examination of literature and qualitative data, particularly in the form of interviews with different actors from different organisational levels. The interpretive paradigm enabled exploration of PT practices from the different perspectives of a Saudi Arabian sample of parties, providing insights into the effect of perceptions on attitudes and behaviour.

3.4 Research Design: (Case Study)

This study utilised a case study approach that integrated a range of data collection and analysis techniques (Grix, 2004). Case studies are naturalistic research methods that enable social phenomena to be studied in great depth within its context (Baxter and Jack, 2008). It is therefore important to carefully select and define the subject or topic being investigated by a case study (Seawright and Gerring, 2008), which should involve careful consideration of the purpose of the research, the research questions, and the theoretical context in which it is situated (Rowley, 2002). Although it is possible to study data from multiple cases (Yin, 2014), the current study is limited to an examination of the perceptions of research participants in six schools a city in Saudi Arabia, who shared experiences in the implementation of PT to support students with SpLD.

The case study methodology was selected for multiple reasons. This approach allows close interactions between researchers and their participants, which gives real opportunities to learn about their personal perspectives and describe their reality, in turn enabling a greater understanding of their behaviours (Crabtree and Miller, 1999). Case studies typically focus on examining the perception that individuals or small groups have of particular phenomena or events (Hitchcock and Hughes, 1995). In order to understand the perceptions of those involved in PT, it was essential to gather information from the participants, examining the influence of factors including the teaching and learning culture, professional training, or personal experiences. This study also sought to investigate the nature and scope of PT from the perspective of each participant, to understand their perception of the impact of certain factors on PT outcomes. Full engagement with this topic required examination of the perceptions of participants of the same situation. The case study provided space for interaction with different participants and exploration of possible differences in their perceptions. These insights were particularly important given the scarcity of research into the thoughts and feelings of students regarding PT in Saudi Arabia.

Another primary reason for utilising a case study approach was to obtain a detailed understanding of the research topic by collecting and analysing in-depth data using multiple collection methods. It was essential to listen to participants' voices, record information about students' interactions and teachers' role during PT sessions as well as collect data related to the rules and policies that govern PT practices. Therefore, this study attempted to ensure the validity of data by triangulating the data from three collection methods: semi-structured interviews, semi-structured observations and document analysis. This mixed methods approach enabled the subject to be examined through different angles, providing multiple realities of the topic to be discovered and understood (Baxter and Jack, 2008).

Case study designs are also a useful research framework when no distinct boundaries exist between the matter being investigated and its environment (Yin, 2003), because they enable a subject to be examined in its natural context. Situating a case in a broader context can provide a greater awareness of the form and scope of the related causal relationships (Gerring, 2007; De Vaus, 2001). In this study, the practice of Saudi teachers occurred within the same context, which was particularly important given the unique cultural and religious dimensions of the Saudi educational context. Case studies are especially suitable when the study context shapes the nature of the reality (Baxter and Jack, 2008), or the values and perceptions of individuals related to the studied social phenomenon. In this context, the characteristics include the beliefs and values of teachers, and the social norms of Saudi society, which shapes behaviour, acceptability and perception. For this reason, it was necessary to consider the context in order to understand the perceptions of participants regarding PT practices.

3.5 Research Sampling

The quality of research and therefore its ability to meet its aims is largely determined by the appropriateness of the chosen sampling strategy (Cohen, Manion and Morrison, 2011). This study adopted a non-probability sampling strategy, using purposive sampling to select participants based on their knowledge and experience. This is a common strategy in qualitative research to ensure access to suitable participants for the aims of the study (Dornyei, 2007), especially when the aim is to gather rich data about the context under evaluation (Cohen, Manion and Morrison, 2011) rather than making generalisations to the wider population (Tansey, 2007). In this study, non-probability sampling enabled the researcher to interview informed participants who both shape and are shaped by the context of the study.

3.5.1 Sample size and selection criteria

In educational research, the correct sample size is largely determined by the chosen analytical method. This number can be as low as 4-5 for qualitative research and 30 for quantitative research (Cohen, Manion and Morrison, 2011). While purposive methods do not enable effective qualitative generalisations from a small number of participants, they do facilitate the inferential process by enabling selection of the most appropriate cases (Seawright and Gerring, 2008). This suggests that the size of the sample is less important than the appropriateness of the sample to the research aims and, therefore, the criteria used to select them (Denscombe, 2010; Patton, 2002).

In the current study, sample size was determined by considering the complexity of PT and the exploratory nature of the study. It was necessary to determine whether participants could facilitate an exploration of the core issues in relation to PT. In addition, the sample needed to be large enough to provide sufficient variation in experience; the more heterogeneous the study sample, as is the case in education, the more participants are typically needed (Hennink, Bailey and Hutter, 2011, pp.89-90). Sample population diversity was reflected in the data through selection of participants based on their specific characteristics (Cohen, Manion and Morrison, 2011), utilising criteria outlined below (see Table 3.1):

- 1- Professional relevance to SEN: participants included special education teachers and special education supervisors.
- 2- Influence on PT: individuals needed to be influential in informing and delivering PT policies, such as special education teachers, as they were influential in designing, implementing and monitoring PT programs for SpLD

students, or special education supervisors, who were influential in the introduction of PT policies to teachers.

3- Plurality in views: participants were selected to ensure that the sample contained a range of perspectives on PT. Views were incorporated from individuals across all levels of the process, including special education supervisors, special education teachers and students who had played the role of tutors or tutees, including those with and without SpLD.

4- Years of experience: teachers were required to have a minimum of one-year experience and students required six months of experience to ensure that they had valid perceptions regarding the effectiveness of PT.

The following selection criteria were also used to guide the selection of schools (see Table 3.1):

1- Active LD programme: schools included in this study had an active LD programme for students with SpLD, as this study was designed to evaluate the efficacy of this specific measure.

2- Active PT programme: schools had to have an established PT programme that had operated continuously for a minimum of one year. This criterion sought to ensure that staff and students were sufficiently experienced in the approach to offer a valid perspective on its relative strengths and weaknesses.

3- Middle schools: primary schools were excluded because PT policy in Saudi Arabia does not include SpLD students in the primary school stage. High schools were also excluded, because too few met the other selection criteria, such as having operated an active PT programme for at least one year. This was despite the requirement for high schools to adhere to national legislation on PT for students with SpLD. This decision was supported by the fact that students develop learning attitudes and skills during middle school that play a significant role in their success in high school, which makes middle school

years an effective predictor of school-based achievements and subsequent levels of school dropout (Roswal et al., 1995). In addition, Thompson (2011) argued that teachers most commonly begin to utilise teaching strategies to help lower-achieving students at middle school, potentially including PT, making it particularly appropriate in the context of the current study.

4- Girls' schools: this decision was informed by a serious logistical and practical consideration involved in the position of a female researcher conducting a study in Saudi Arabia. At the time of writing, gender segregation rules mean that only women are permitted to teach girls. This prevents female researchers from all interaction with anyone involved in boys' schools.

5- Locational considerations: the focus was on schools located in the capital city of Saudi Arabia, Riyadh. Although the initial intention had been to conduct the study in Dammam, the hometown of the researcher, no schools were found that had a sufficiently established PT programme, despite it being one of the biggest cities in Saudi Arabia. In contrast, multiple schools were identified as being suitable in Riyadh. In addition, the capital is the location for the GASE, which is responsible for establishing SEN policies and regulations. This provided valuable access to numerous special education policies and guidelines.

The context of the study is culturally homogeneous, shaped by Arabic traditions and the Islamic religion. Although the main spoken language in Saudi Arabia is Arabic, some people speak English as a second language. The participating schools are public and receive full governmental support. They all include students with SpLD in mainstream classrooms, with the provision of supplementary individual support that is available in learning resources classrooms. The students had a range of educational difficulties and all come from low-to-middle social classes, with no noticeable ethnic differences.

In Saudi Arabia, with education being centralised, the MoE dictates the curricula and teaching procedures for public schools. Teachers support SpLD students within the scope of their class curricula, without the introduction of additional extracurricular activities. Education supervisors are responsible for the delivery of educational policies to schools, which generally require teachers to implement specific pedagogic approaches. This demonstrates that schools operate within a hierarchical structure: from the MoE at the top, to education departments and headteachers, to teachers, parents and students. The lowest level of this structure is given little consideration. Additionally, while education supervisors offer a degree of support, there are only limited professional training opportunities for teachers in terms of lesson plans, teaching strategies, assessment methods and professional ethics.

Table 3.1 List of sample selection criteria

List of criteria	Participants
Professional relevance to SEN	SEN teachers
	SEN supervisors
Influence on PT (informing and delivering PT policies)	SEN teachers
	SEN supervisors
Plurality of views	SEN teachers
	SEN supervisors
	Mainstream students
	SpLD students
Years of experience: A minimum of one-year experience in implementing PT	SEN teachers
Years of experience: A minimum of six-months experience in participating in PT	Mainstream students
	SpLD students
Had an active LD programme for SpLD students	Schools
Had an active PT programme for a minimum of one year	Schools
Middle age group	Schools
Girls' schools	Schools
Locational considerations	Schools

The study was undertaken in six middle schools in Riyadh, Saudi Arabia. The sample included six of the nine SEN supervisors in Riyadh, as one withdrew and two had retired recently and were unavailable for comment. Nine SEN teachers were also included. This represents the SEN teachers who worked in the participating schools, because most Saudi schools have either one or two

dedicated SEN teachers. Additionally, all students who met the criterion of sufficient PT experience were selected in this study. The sample included 18 mainstream students (tutors) and 19 SpLD students (tutees). The coding and numbering system used for participants in this study is illustrated in Table 3.2.

Table 3.2 Coding and numbering system for participants

Schools = S	S1	S2	S3	S4	S5	S6	Total
Special education needs teacher = ST	ST3 ST4	ST6	ST8	ST5	ST7 ST9	ST1 ST2	9
Mainstream student = MS	MS26 MS27 MS29	MS7 MS9 MS11 MS13	MS33 MS 34	MS15 MS16 MS17 MS20 MS23 MS24	MS37	MS2 MS5	18
Student with SpLD = Ss	Ss25 Ss28 Ss30 Ss31 Ss32	Ss6 Ss8 Ss10 Ss12	Ss35 Ss36	Ss14 Ss18 Ss 19 Ss21	Ss22	Ss1 Ss3 Ss4	19
Special education needs Supervisor = SS	SS1, SS2, SS3, SS4, SS5, SS6						6

3.6 Methods of Data Collection

Semi-structured interviews, semi-structured observations and school and policy documents were used as methods of collecting qualitative data, including their stated opinions and behaviour in the classroom context. These methods are discussed below, in terms of aims, design, content and type.

3.6.1 Semi-structured interviews

Interviews are a popular qualitative technique that grant access to perceptions within their natural settings, providing insights into various understandings, values and interpretations of a social phenomenon (Packer, 2011). In this study, interviews were the main data collection tool and were therefore designed around the AT elements and themes that emerged from the literature review. This informed the areas to explore and possible questions.

In qualitative research, interviews can be categorised as being structured, semi-structured or unstructured (Thomas, 2009). In structured interviews, participants are all asked the same questions, which are also typically closed-ended, in an attempt to ensure fairness and facilitate data analysis (Thomas, 2009). In contrast, unstructured interviews involve no pre-determined format and no pre-specified questions, and therefore usually take the form of relaxed conversations with participants (Robson, 2002). The current research utilised semi-structured interviews, which offer certain benefits of the other types of interviews, with the researcher following a structured schedule, but retaining the flexibility to insert new questions in response to statements by participants. In this way, semi-structured interviews guarantee that key topics are covered, while enabling the researcher to probe for clarification or investigate unforeseen areas. Three semi-structured interview schedules were employed, which had been designed specifically for SEN supervisors, SEN

teachers, and students, both mainstream and those with SEN. The design and the content of these interviews schedules are discussed in the following sections.

3.6.1.1 Interview schedule – SEN teachers

The interviews with teachers sought to investigate the following areas: understanding of PT, implementation of PT, perceptions about the effectiveness of PT, perceptions about the factors that facilitate or hinder the use of PT and suggestions to improve implementation of PT. The first phase of the interview consisted of four questions that focused on perceptions about the meaning and purposes of PT, the importance of this teaching method for supporting SpLD students, and the role it plays in supporting these students. The second phase consisted of seven questions that examined the implementation of PT, in terms of the selection and preparation of students, teacher roles and responsibilities in PT, the roles and responsibilities of students (tutors and tutees), and the guidelines given for implementation. The third phase examined perceptions of the academic and socio-emotional aspects utilised to determine the effectiveness of PT. The fourth phase consisted of nine questions on the factors that facilitate their current practices of PT and their opinions on the additional sources of support that would improve these practices, as well as the obstacles to PT and their opinions about how to overcome such challenges. The interviews concluded with a final phase in which teachers were asked to add or justify any suggestions they might have to improve the implementation of PT.

Illustrated below is an example of the connections between AT, literature review themes and the interview structure for teachers (see Table 3.3). This is followed by Table 3.4, which outlines the relationship between these interview questions and the research questions.

Table 3.3 An example of the connections between AT, literature review themes and the structure of the interview for teachers

AT elements	Literature review themes	Example interview questions
Subject	The type of PT and the nature of students' interactions	What do you understand by the term PT? How do you describe the role of PT to support students with SpLD?
Object	The type of PT and the nature of students' interactions	What do you see as the purpose of PT? How important do you think PT is for SpLD students? Why?
Division of labour	The type of PT and the nature of students' interactions	How do you prepare the students (tutors and tutees) for the PT sessions? How do you prepare the students (tutors and tutees) for the PT sessions? What parameters do you cover in training students for the purpose of PT? Can you describe your role before/during/after PT sessions? Can you give some examples?
Tools	Physical Environment and Resources	What additional sources support do you need to implement PT (e.g. teaching aids and available places for training and meeting students)?
Community	Collaboration between professionals	To what extent do the following factors facilitate/ hinder your implementation of PT? (e.g. special education supervisor's support, school/admission support, and staff collaboration)
Rules	PT policy within the Islamic context in Saudi Arabia	Do you have guidelines for the implementation of the PT with SpLD students? Please explain?
Outcomes	PT and Academic Development PT and Socio-emotional Development	Can you give examples of success stories of SLD students, who have been able to progress (e.g. academically, socially, or emotionally) because of PT?

Table 3.4 The relationship between the three research questions and the interview questions for teachers

Research question	Interview dimension	Interview questions
Question 1: How is PT perceived and used to support students with SpLD in Saudi Arabia?	Dimension 1: Understanding of PT	Q1- Q2 - Q3 - Q4
	Dimension 2: Implementation of PT	Q5 - Q7 - Q8 - Q9 - Q10 - Q11
	Dimension 5: Suggestions to improve the current implementation of PT	Q 24
Question 2: What are the perceptions of teachers, students and supervisors of the effectiveness of PT in terms of enhancing the learning experiences of students with SpLD?	Dimension 3: Perceptions about the effectiveness of PT	Q12 – Q13 – Q14
Question 3: What are the perceptions of teachers, students and supervisors about the factors that facilitate or hinder the implementation of PT for students with SpLD?	Dimension 2: Implementation of PT	Q6
	Dimension 4: Perception about the factors that facilitate or hinder the use of PT	Q15 - Q16 - Q17 - Q18- Q19 - Q20 - Q21 - Q22 - Q23

The interviews were conducted face-to-face over two rounds: prior to classroom observations, in order to gain information about the perceptions of teachers regarding the meaning and efficacy of PT, and after classroom observations, to gather information on the implementation of PT and the factors influencing its perceived effectiveness. This provided answers about

issues that emerged during the observations. In order to help concentration, the interviews used a combination of question types, including open questions and questions using Likert scales. Likert scales were utilised to provide insights into the perspectives of each participants, with each question followed by open-ended questions or prompts to elicit more information and examples through why and how questions. Examples of follow-up questions were:

- “Why do you think PT is important for supporting SpLD students?”
- “How PT was effective in improving confidence among SpLD students?”

3.6.1.2 Interview schedule – SEN supervisors

Supervisors were given many of the same questions asked of SEN teachers, such as those concerning the meaning and effectiveness of PT. However, the questions prepared for the SEN supervisors focused on policy, specifically regarding the administration and the MoE, as well as teacher training, and availability of resources. SEN supervisors were questioned about their role in arranging continuous professional development training for SEN teachers, the identification of the resources required for inclusive schools to deliver PT for students with SpLD, and providing ongoing support and advice to all involved in SEN provision. In particular, supervisors were given opportunities to comment on the implementation of PT as a policy initiative and their role in supporting SEN teachers:

- “What is your opinion about the current PT implementation?”
- “What policy/guideline do you have for PT?”
- “How do you transfer this policy/guideline into practice?”
- “Do you have any assistance (such as: the MoE) for transferring the policy/guideline?”
- “To what extent do you facilitate the current implementation of PT?”

- “What ideas for PT are you developing at present?”

3.6.1.3 Interview schedule – mainstream and SpLD students

Students are the main actors in the implementation of PT and so have especially valuable insights into the extent to which official policy has been translated into practice in their schools. In order to ensure that SpLD students did not experience any disadvantage compared with their mainstream peers, they were interviewed using a friendly conversational approach, without written answers to questions. The questions in the interview schedule primarily sought to enable the triangulation of the data collected from teachers and supervisors regarding the meaning, purposes and effectiveness of PT. The students were also asked about their perception of barriers to the implementation of PT and what they felt could improve PT provision at their school.

3.6.2 Semi-structured Observations

Observations allow the actual behaviour to be studied, rather than forcing reliance on potentially biased beliefs about the actions or thoughts of participants (Walshe, Ewing and Griffiths, 2011). In this way, observations can provide useful insights that might otherwise be missed or hidden, uncover issues that individuals may not wish to discuss freely, granting access to personal knowledge rather than perception-based data. Observations allow researchers to study and record events and behaviour as they happen, as well as providing data on the social setting and physical environment. In educational studies, these data can include the organisation of students, verbal and non-verbal interactions, or the structure and delivery of aspects of an education programme (Cohen, Manion and Morrison, 2011). Classroom observation is intended to enable the examination of teachers and students to

learn about the practices and behaviours that occur naturally. This method is poor at enabling effective qualitative generalisations to be made, but can nevertheless be useful to clarify or confirm data obtained from other research techniques. It is important to note that the presence of an observer may change the behaviour of students and teachers. Therefore, attempts were made by the researcher in the present study to forge strong, positive relationships with participants and to ensure clarity in the research objectives by giving presentations and answering questions (Denscombe, 2010).

This study utilised sixteen semi-structured observations, enabling an agenda to inform the key issues to be observed, while simultaneously allowing incorporation of emergent behaviour and occurrences into the data. The researcher typically sat at the rear of the class, taking notes on class activities, student interactions, levels of engagement and student motivation during PT sessions. Notes were also taken on the behaviour of tutors (explaining, discussing, asking questions, correcting the tutee's answers and providing verbal and physical reinforcements) and tutees (their role in listening, asking for help, responding to questions and working on tasks). Although the observations primarily focused on students, the following teacher behaviours were recorded: providing an overview of the lesson, facilitating active participation, encouraging student interactions and correcting mistakes made by tutors. In addition, notes were taken of the classroom environment and educational setting. These were supplemented by selected direct quotes from the classroom interactions.

3.6.3 Document analysis

Document analysis is a social research method that can provide valuable data. It is particularly suitable in the triangulation of data as part of a mixed methods approach, as it often provides a different perspective than other

qualitative techniques (Johnson, 1994). In this study, document analysis was used to enhance and interpret the data from the interviews and observations. Typically, documents are written texts that provide social insights (Hitchcock and Hughes, 1995). However, the researcher needed to establish what documents exist, their purpose, their location in the participating schools or the Ministry, and their availability for the research. In order to ensure that research aims were met, clear criteria were prepared for the selection and analysis of documents (Cohen, Manion and Morrison, 2011).

The current study employed two main criteria to select documents: those which were relevant to the research questions; and those which provided important information about PT policy, practice or provision. Documents were selected for analysis in the following categories:

- National policy documents published since 1996, as the GASE increased support for students with SpLD in Saudi Arabia during this period;
- School documents for students with SEN, such as student scores, teaching plans and instructions, as these provide insights into the link between planning and practice;
- National policy or school documents containing the following keywords: “special needs”, “specific learning difficulties (SpLD)”, “collaborative learning” and “peer tutoring (PT)”; and
- National policy or school documents containing references to “teaching strategies”, “teaching plans” and “teaching guides”.

These criteria are presented below (see Table 3.5). Reviewing the documents concerning teaching strategies and special services for students with SpLD enabled the researcher to determine whether current PT practices are based on special education policies in Saudi Arabia. Access to these documents, SEN policies and school documents was provided by the GASE.

Table 3.5 Criteria for document analysis

Criteria for document analysis	Types of documents
Special education policies and guidelines that include the phrases: “special needs”	Policy documents published by the MoE
Special education policies and guidelines that include the phrases: “specific learning difficulties (SpLD)”	Policy documents published by the MoE
Special education policies and guidelines that include one or more of the following words or phrases: “peer tutoring (PT), collaborative learning, teaching strategies, teaching plans, teaching guides”, also combined with “special needs, Specific learning difficulties (SpLD)”	Policy documents published by the MoE
Policies and guidelines that include the phrases “special needs”	Policies and guidelines published by the schools
Policies and guidelines that include the phrases “specific learning difficulties (SpLD)”	Policies and guidelines published by the schools
Policies and guidelines that include one or more of: “peer tutoring (PT), collaborative learning, teaching strategies, teaching plans, teaching guides” combined with “special needs, Specific learning difficulties (SpLD)”	Policies and guidelines published by the schools
Student records	Grading certificates, IEP and students’ worksheets

3.7 Data Collection Procedure

Data were collected between 27 January and 18 April 2016, with the majority being collected during the second half of the school year and before the final exams. The procedures followed in this study were as follows. Letters were sent to all potential participants, outlining the aims and procedures of the study, and inviting them to take part. In addition, each letter included a consent form for willing participants to review and sign.

Classroom observations and interviews were scheduled during the first meeting with teachers. In order to be sensitive to their duties and obligations during school hours, teachers were then interviewed outside of their teaching commitment hours. The interviews were conducted in the learning resources room of their school, with each discussion lasting 40-60 minutes. All interviews were in Arabic and were audio recorded. Interviews were conducted with teachers in two rounds: before and after classrooms observations. Students (tutors and tutees) were also invited to face-to-face interviews, which were held in the learning resources room during break and before the end of their daily lessons. These interviews were organised by the classroom teachers, in order to minimise the disruption to students, after observations of classes in which PT activities had occurred. These interviews lasted 25-45 minutes. Supervisors were interviewed face-to-face in their offices after data had been collected from schools. The interviews with supervisors lasted 45-60 minutes. In all cases, the interview guides were based on AT, with questions focusing on the subject, object, outcome, setting, community, rules and norms, artefacts, and division of tasks. Observation protocols were prepared in order to guarantee consistency and ensure that data collected were in a clear structure for ease of analysis. Observation protocols were based on recording all aspects of the events under observation. The data were then classified into the appropriate aspect of AT.

Finally, for the document analysis, school records were examined and other relevant documents were gathered. Important documentation gathered at this stage included: 'The Regulations of Special Education Institutes and Programmes' (RSEIP) (2001), 'The System of Care for Disabled People in the Kingdom of Saudi Arabia' (2000), 'The Guide to Specific Learning Difficulties Programs in Middle and High School Stages' (GSpLD) (2011a), 'The Organizational Guide for Special Education' (2014a), 'The Procedural Guide for Special Education' (2014b), 'The Guide in Specific Learning Difficulties' (2015).

3.8 Data Analysis Procedure

This study utilised qualitative data analysis techniques that suited the instruments used. Audio recordings were made of the semi-structured interviews, which were then transcribed. This enabled entire conversations to be reviewed in detail on multiple occasions during the analysis. Each transcript was then recorded in a Microsoft Office Word file and the anonymity and confidentiality of participants guaranteed by using codes to replace personal and identifying information, such as their names or schools (Cohen, Manion and Morrison, 2011). The data were initially analysed in Arabic (the participants' original language) to ensure that no key concepts were lost during translations. This analysis was then used to select text to translate and then analyse in English.

Thematic analysis was conducted for all qualitative data obtained from classroom observation notes and semi-structured interviews with teachers, students and supervisors (Braun and Clarke, 2006). This analysis incorporated consideration of the research questions, the elements of AT, and the themes that emerged from the literature review. Thematic analysis enables inductive and deductive organisation and interpretation of raw data (Braun

and Clarke, 2006; Fereday and Muir-Cochrane, 2006), which this study used to identify themes and sub-themes (topics and categories). Initial deductive coding was provided by the research questions, interview schedules, literature review themes, and AT elements. Inductive coding was represented by the additional themes and sub-themes that arose naturally from the discussions recorded in the transcripts, as facilitated by repeated, careful reading. The following steps were adopted in the analysis of qualitative data (Maguire and Delahunt, 2017; Braun and Clarke, 2006), as summarised below.

The thematic analysis process utilised in this study was a two-stage process. Deductive analysis (“top down” analysis) was conducted by reading and reviewing the data, which was then colour coded using a pre-generated list of themes and sub-themes informed by the research questions and literature review (Braun and Clarke, 2006, p. 12). These codes were then reviewed, modified and combined to create larger themes. The second stage in the analytical process involved the remaining raw data being subjected to inductive analysis (“bottom up” analysis) (Braun and Clarke, 2006, p. 12), which allowed identification of emergent themes. At this stage, the unmatched data were re-evaluated and analysed in the context of the findings from other data sets (observations, documents, and interviews), enabling them to be allocated into new or existing themes. Where required, this was facilitated by examining data to identify similarities or differences across groups of data. The final consolidated themes were then analysed. For a detailed example of the data analysis process, see Appendix 3.

As illustrated in the previous section, several documents were obtained, photocopied by the researcher and then authorised by an official stamp by the relevant parties. Given the primary aims of the document analysis in this study (see section 3.6.3), the documents were coded and content analysed. The documents were reviewed multiple times to ensure that no important information was neglected and key aspects were highlighted. This process

generated rich data that reinforced the findings obtained through interviews and observations.

3.8.1 Translation

The quality of translation plays an important role in the accuracy of data. However, there are many factors affecting that quality, some of which cannot be controlled by a researcher (Phillips, 1960). When the researcher acts as the translator, the quality of output is strongly influenced by their language mastery, their personal experience, and the culture of the study population (Vulliamy, 1990). In other situations, the quality of translation is primarily influenced by the competence and history of the translator, and by their interactions with the researcher (Temple, 1997). Regardless of approach, it is important to consider how and to what degree translation introduces bias into the research process and how to ensure accurate translation of the source data.

One of the most common techniques for assessing accuracy in this process is back translation. This process involves translating the documents from the target language (English) to the source language (Arabic), comparing the versions for ambiguities or discrepancies, and then making any necessary clarifications (Ercikan, 1998). However, back translation can be time-consuming and complex (Birbili, 2000). It can also result in the final version being a compromise between the original statements and the translation. Importantly, the false lexical equivalence it creates can instil a misplaced confidence in the text (Deutscher, 1968).

Three strategies were used in the current study in an attempt to mitigate potential issues with translation. As the researcher shares the same first language as the participants (i.e. Arabic), she was able to record the raw data in Arabic. She then translated transcripts into her second language (i.e. English). A native English speaker checked the translated transcripts for

clarity and lexical accuracy. Finally, the text was back translated by the researcher and challenged by a bilingual Arabic-English colleague, who is a British citizen and holds a PhD in education from a UK university. Any differences or ambiguities were resolved in conversations and emails by the three parties.

3.9 Producing Trustworthy Knowledge

Positivists often question the trustworthiness of qualitative research, perhaps because naturalistic studies are unable to address validity or reliability in the same way (Shenton, 2004). Reliability is typically measured in quantitative research through the use of statistical techniques that are inapplicable in many qualitative studies. Therefore, naturalistic researchers commonly assess whether or not repeating the study using similar participants or contexts would yield similar outcomes. Many naturalistic investigators seek to distance themselves from the positivist paradigm by the adoption of different terminology and criteria to determine trustworthiness. Guba (1981) suggested four criteria to assess the significance, relevance and impact of qualitative research, which were mapped against equivalent positivist tests. In the section below, a detailed discussion is provided of these criteria: internal validity (credibility); external validity (transferability); alternative reliability (dependability); and objectivity (confirmability).

The first consideration is internal validity. In a quantitative study, this refers to whether the tests measure what is intended. The equivalent concept in a qualitative investigation is credibility, which examines the degree to which findings are compatible with the reality (Merriam, 1998). One way to achieve credible outcomes is by triangulation, which means the comparison of data from different sources (Shenton, 2004). The triangulation of data sources and methods was utilised in the current study, with data being sourced from

observations, document analysis and interviews with teachers, students and supervisors. In this way, the data from teachers and supervisors was checked against that from students. Studies also gain credibility through protracted engagement (Lincoln and Guba, 1985), which requires familiarity with the culture of the participants and culture before the commencement of data collection (Shenton, 2004). In this study, the experience of the researcher as a SEN teacher in Saudi Arabia provided the requisite familiarity, allowing a relationship of trust to be established with participants, and providing early access to appropriate documents.

Quantitative research uses external validity to determine the degree to which its findings are generalisable to a wider context (Merriam, 1998). However, this broad applicability of findings is more difficult to demonstrate in qualitative studies, due to the relatively small sample sizes involved (Shenton, 2004). Qualitative research therefore tests for transferability, which views unique cases as being valid examples in a wider setting (Denscombe, 2010; Stake, 1994), although this requires the provision of sufficient contextual information about the fieldwork (Lincoln and Guba, 1985). For this reason, the researcher provided extensive background information about the context of this study, including culture, values and policy, supplemented by a thick description of the phenomenon being investigated. This was intended to grant comprehensive understanding of the context, enabling comparison of the findings to other situations experienced by readers. Given that the current study was conducted during the introduction of the Saudi Vision 2030, which includes within its aims the implementation of more student-centered teaching methods like PT, transferability was central to the research design. This study was intended to offer practical insights and comparisons that would help practising middle school teachers, as well as officials and academics, to review and improve PT practices.

The term dependability is the qualitative equivalent to reliability, which quantitative studies use to show that repetition of the research using similar methods and similar participants in a similar context would yield similar results (Shenton, 2004). There is a strong link between dependability and credibility (Lincoln and Guba, 1985). In other words, demonstrating credibility, through detailed reporting of the study process or the use of varied data collection methods, tends to ensure dependability, because these steps would enable another researcher to replicate the research (Shenton, 2004). The current study attempted to ensure transparency and dependability through the clarification of the research design, process and its implementation, in addition to detailed information being given on data collection and analysis procedures.

The current study attempted to use inter-rater reliability to ensure the reliability of generated codes (McAlister et al., 2017; Blandford, Furniss and Makri, 2016). A sample of the interview transcripts was sent to another coder who had experience in coding qualitative data in the field of education. Twelve interviews were chosen randomly from all participants (SEN teachers, SEN supervisors and students) and were coded independently by the coder. These were then checked for a percentage agreement. Following formula proposed by Miles and Huberman (1994), the percentage agreement was generated by “dividing the number of coding agreements by the number of agreements and disagreements combined” (Campbell et al., 2013, p. 309). This method was first conducted for each individual theme, with the results indicating a high inter-rater reliability for most themes. For instance, the percentage agreement for the lack of training among tutors was 96% and for the lack of collaboration between SEN teachers and other school staff was 84%. The same method of calculation was utilised for the total number of codes by “dividing the total number of agreements for all codes by the total number of agreements and disagreements for all codes combined” (Campbell

et al., 2013, p. 309). The overall inter-reliability percentage agreement was calculated as 90%. According to Hodson (1999) a percentage agreement of 79% indicates a relatively high inter-rater reliability. Therefore, the level of 90% achieved by the current study was deemed to be satisfactorily reliable.

Objectivity can be assisted by the use of scientific measurements and instruments that do not require human perception or interpretation (Patton, 1990). However, some degree of bias is still likely, because research tools are designed by humans (Patton, 1990). Qualitative research addresses this concern through confirmability, which seeks to ensure that the findings are based on the data given by participants, rather than the researcher (Shenton, 2004). In this study, researcher bias was monitored through discussions of the findings with participants and the later interpretations being challenged by the research supervisor. Participants were contacted frequently during analysis to ensure the accuracy of data and interpretations of their responses.

3.10 Ethical Considerations

The consideration of ethical issues is integral to any research, as they directly affect the integrity of a study, as well as providing a framework that ensures studies are conducted properly and morally (Cohen, Manion and Morrison, 2011). In social science, issues pertaining to informed consent are central to ethical considerations, including the benefits of participation, confidentiality, and the right to withdraw (Bell, 2014). Informed consent means that potential participants should understand their role and the aim of the research (Thomas, 2009). Ideally, this will facilitate collaboration between researcher and participants, giving the latter a sense of ownership over the study.

In order to ensure that social science research adheres to good ethical practice, universities have formal ethics procedures that guide researchers (Thomas, 2009). This study requested ethical approval from the University Ethics

Committee (see Appendix 2) and then negotiated access to schools in Saudi Arabia. Official permission was granted in January 2016 in the form of a formal letter from the Saudi MoE, via the Cultural Bureau of Saudi Arabia in the UK. All participants received a consent form that provided the information about the researcher, outlined the purpose and structure of the study, guaranteed their confidentiality and the anonymity of the data, and stated the right of participants to withdraw from the study at any time (see Appendix 2). The assurance of anonymity encouraged the participation of individuals in the study, making them more likely to provide more honest answers and to give permission for their interview comments to be quoted directly. All personal data in this research was password protected and securely stored on the researcher's computer. During analysis, each participant was assigned a number in order to ensure anonymity. Once sufficient time has elapsed, all data will be destroyed, in compliance with the ethical guidelines of the University of Warwick.

As this study dealt with young students, there were other important ethical considerations that informed the study design. Article 12 of the British Ethical Guidelines states that sufficiently developed children should be supported to enable them to give informed consent and express their opinions on all related matters (BERA, 2011). Therefore, all participating children were given a consent form to read and sign. In addition, care was taken to help young students feel more comfortable in the presence of the researcher. This was important, as children are not commonly given the opportunity to express their opinions in Saudi Arabia and so may be reluctant to communicate freely with adults, especially in a formal school setting. This issue required great care, especially given that the study focused on students with SpLD, who are particularly sensitive to others perceiving them as being 'different'. In order to overcome these potential challenges, attempts were made to get to know each of the children and to help them recognise that their comments were

valid. Once the researcher was accepted as a trusted adult, the aims of the research were articulated in clear, appropriate terms. Even after parental consent was obtained, the children were asked if they wanted to participate and were reassured that they were free to withdraw from the process at any point.

3.11 Positionality of the Researcher

The process and the data produced during research are informed by the positionality of the researcher (Dixson and Seriki, 2013), including their research experience (e.g. research training and publications) and individual identity (e.g. gender, age and life history) (Hopkins, 2007). Positionality also includes the degree to which a researcher is perceived as an ‘outsider’ or an ‘insider’ in the research setting. This is closely related to the way that a research self-represents (Mullings, 1999), which can significantly affect access to a group or organisation. For example, demonstrating a command of industry-specific knowledge and language may enable a researcher to become a ‘temporary insider’ and therefore gain access to valuable information.

As a researcher, I presented myself as a Saudi doctoral student with an academic background in SEN. I was familiar with the context of SEN teaching at schools in Saudi Arabia, because of my status as a Saudi national, a graduate of SEN from a Saudi university, a teacher of SEN students and now a lecturer of SEN at a Saudi higher educational institution. This familiarity gave me greater credibility and facilitated communications with study participants, as well as enabling me to work effectively. My position removed some of the cultural constraints, granting me better insights into the perspectives of participants. For example, my experiences in teaching SEN students enabled me to have more frank, relaxed discussions with teachers and supervisors during interviews. Some were even interested in exchanging

information about special education services for SpLD students. Personal beliefs can influence the objectivity and validity of a study, however the role of researchers in analysis prevents this subjectivity from being completely removed (Denscombe, 2010). Nevertheless, I attempted to overcome these issues by clarifying my position throughout the data collection and analysis processes, as well as distinguishing between the data gathered from participants (as presented in quotations) and my own interpretations and discussions. The use of multiple data collection methods also helped me to present myself as both an outsider and an insider. For example, I was perceived as an insider during discussions with teachers, whereas utilising non-participant observations allowed me to capture data on the actions of teachers and students during PT, without requiring my direct engagement in the activities.

3.12 Conclusion

This chapter has discussed the core considerations that have shaped the current research, including the theoretical framework (AT) underpinning the research design, the data collection and analysis procedures, and the means utilised to access the research population. The stance of this study was that research should be informed by, and relevant to, the educational context, with the ultimate aim of developing the systems and practices examined. All parties should be enabled to freely express their perspectives without prejudice, thereby offering real insights into the research context, namely the use of PT in Saudi classrooms.

This chapter has also outlined the chosen research paradigm (interpretivism), the core methodology (case study), and the research methods utilised in the current study (semi-structured interviews, semi-structured observations and document analysis). An explanation has been given of the sample selection

criteria, the data collection methods, and approach chosen for data analysis. Finally, this chapter has demonstrated the steps taken to consider reliability and validity, the positionality of the research, and compliance with ethical guidelines, thereby increasing trustworthiness of outcomes.

Chapter Four Results

4.1 Introduction

This chapter presents the results of the study, outlining the perceptions of all stakeholders (teachers, pupils and supervisors) regarding the use of PT programmes to provide educational support to students with SpLD in Saudi Arabia. The following research questions were investigated:

1. How is PT perceived and used to support students with SpLD within the cultural and religious framework of Saudi Arabian middle schools?
2. What are the perceptions of teachers, students and supervisors of the effectiveness of PT, in terms of enhancing the learning experiences of students with SpLD?
3. What are the perceptions of teachers, students and supervisors regarding the factors that facilitate or hinder the implementation of PT for students with SpLD?

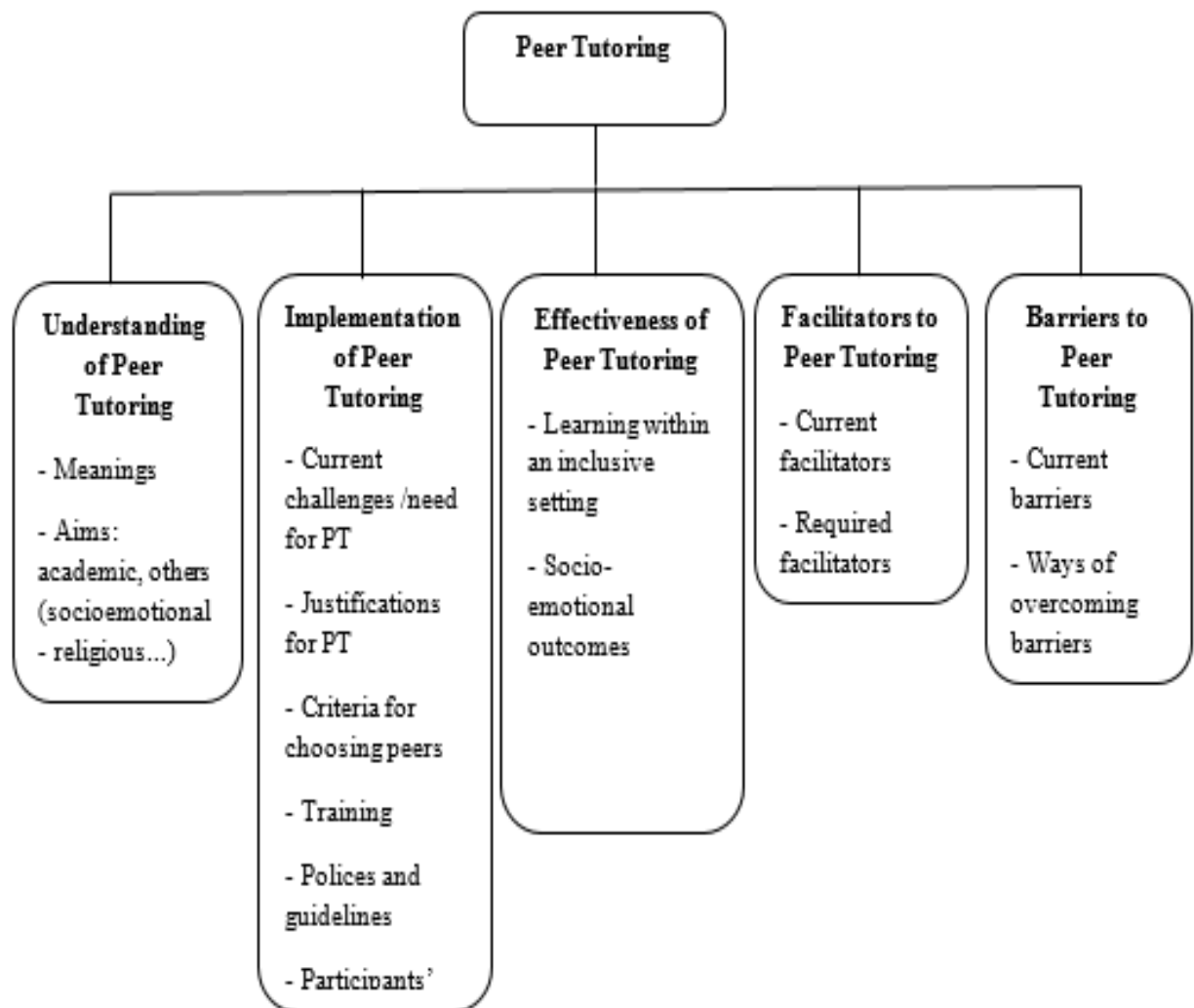
This study used qualitative data collection methods, in the form of interviews, observations and document analysis. The data were coded and interpreted, then thematically analysed to uncover emergent themes. Finally, AT was chosen as the main analytical framework to understand, organise and integrate the qualitative data.

Interviews were conducted with participants and then immediately transcribed, in order to ensure accuracy, especially given the noisy environments, and to minimise the impact of responses from earlier interviews on later ones. After data collection, I re-listened to the interview transcriptions and crosschecked them for accuracy. The interviews were then

systematically organised according to subject, because many answers were long and included elements of repetition and rephrasing.

The data were analysed prior to the translation of the Arabic transcripts into English in an attempt to achieve semantic equivalence and avoid mistranslation or summarising of meaning by analysing the actual wording of respondents. The initial analysis began by reading through the interviews with SEN teachers and coding their responses. The codes were then examined in the context of the research questions and sorted into potential themes. An initial template (see Figure 4.1) was then devised to facilitate the analysis of the data from interviews with students and supervisors.

Figure 4.1 Initial data analysis template



In ensuring that this template could be used for all data analysis, difficult choices had to be made. For example, it was necessary to decide whether to code using and augmenting selected themes identified in the literature, or on

themes emerging from the collected data supplemented by literature, or based on AT dimensions and adding to them.

Initially, the most satisfactory approach was a template based on the collected data. However, the final solution was a template based on the elements of AT, which enabled all the data to be captured in relevant categories (see Table 4.1). The main findings are summarised below (see Table 4.2).

Table 4.1 Analysis framework based on activity theory

Dimensions of AT	Themes
SUBJECT (Actors: peer tutor, peer tutee, SEN teacher and SEN supervisor)	- The meaning of PT
OBJECT (AIMS) AND OUTCOMES	- Academic development - Socio-emotional development
TOOLS	- Resources (Physical environment, time and human resources)
DIVISION OF LABOUR	- Peer tutors' roles - Peer tutees' roles - SEN teachers' roles (Training, planning and supervision)
COMMUNITY	- School administration support - Collaboration between school staff - Collaboration between teachers and supervisors
RULES	- The Lack of systemic support regarding PT - Limited holistic approach to SEN issues (diagnosis and assessment) - Institutionalizing PT (direct involvement of the MoE)

Table 4.2 Summary of the main findings based on activity theory

Dimension of AT	Themes and key findings
SUBJECT	<p>* The meaning of PT:</p> <ul style="list-style-type: none"> -Unidirectional teaching method -Playing the role of teacher and being called a “small teacher”, “teacher assistant” and “shadow teacher” -A friendship between students -The need for a homogeneous PT
OBJECT (AIMS) AND OUTCOMES	<p>* Academic development:</p> <ul style="list-style-type: none"> - Improving SpLD students’ performance - Improving SpLD students’ Motivation - Improving SpLD students’ participation <p>* Socio-emotional development:</p> <ul style="list-style-type: none"> - Increasing confidence among SpLD students

Dimension of AT	Themes and key findings
	<ul style="list-style-type: none"> - Various perceptions with regards to the effectiveness of PT in enhancing social and emotional development among SpLD students
TOOLS	<ul style="list-style-type: none"> * The physical environment: <ul style="list-style-type: none"> - The size of classrooms and space for activities hindered PT - The large number of students in classrooms perceived as a barrier to PT - The lack of technology devices and educational aids * Time: <ul style="list-style-type: none"> - The lack of time due to the intensity of lessons and scheduling issues hindered PT * Human resources: <ul style="list-style-type: none"> - A need for teaching assistants (TAs), additional SEN teachers and SEN supervisors - Selection criteria for choosing peer tutors: the notion of normality, weakness, excellence and personal characteristics - Selection criteria for choosing peer tutees: the level of difficulty and students' needs - Common criteria: being in same age and having positive attitude

Dimension of AT	Themes and key findings
DIVISION OF LABOUR	<p>* Peer tutors' roles:</p> <ul style="list-style-type: none"> - Playing the role of a teacher as a transmitter of knowledge - Providing explanations and direct instructions - Simplifying the information - Providing practice opportunities, checking students' understanding and offering positive reinforcement - Helping SpLD students in their homework and projects - Helping SpLD students to memorize information - Helping SpLD students to keep up with what they missed if they were absent and reminding them of exams and homework <p>* Peer tutees' roles:</p> <ul style="list-style-type: none"> - Playing a passive role (mainly listening to their tutors and followed their instructions) - Participated actively in answering tutors' questions <p>* Training:</p> <ul style="list-style-type: none"> - Insufficient in the training provided for students

Dimension of AT	Themes and key findings
	<ul style="list-style-type: none"> - Establishing relationships and creating familiarity among students - Offering basic advice and instructions on teaching SpLD students - Explaining the meaning and the purpose of PT - The lack of SEN teachers' preparation to implement PT hindered their implementation of PT - A call made by all SEN teachers for more training courses in special needs and in PT specifically <p>* Planning:</p> <ul style="list-style-type: none"> - Perceiving planning to be a barrier to PT - Perceiving planning to be a vital factor for implementing PT - Limited understanding of the meaning of planning for PT <p>* Supervision:</p> <ul style="list-style-type: none"> - A lack of scheduled and official supervisory meetings with students - Rewarding peer tutors was perceived to be an essential part of the supervisory role of SEN teachers - A lack in monitoring PT sessions especially those which took place in the mainstream classrooms

Dimension of AT	Themes and key findings
COMMUNITY	<p>* School administration support:</p> <ul style="list-style-type: none"> - Offering permission for implementing PT was the main facilitator provided by school administration - The lack of support in providing SEN teachers with financial support and facilitating rewards - Neglecting SEN teachers - No roles in the implementation of PT and in resolving conflicts among teachers <p>* Collaboration between school staff:</p> <ul style="list-style-type: none"> - The lack of collaboration between SEN teachers and mainstream - The lack of awareness among almost all SEN teachers with regards to the role of school counsellors in supporting PT <p>* Collaboration between teachers and supervisors:</p> <ul style="list-style-type: none"> - A call among most SEN teachers to activate the role of SEN supervisor in supporting the current PT practices
RULES	<p>* The Lack of systemic support regarding PT:</p> <ul style="list-style-type: none"> - The lack of policies and guidelines for implementing PT

Dimension of AT	Themes and key findings
	<ul style="list-style-type: none"> - Placing the onus on SEN teachers to implement guidelines on PT * Limited holistic approach to SEN issues (diagnosis and assessment): <ul style="list-style-type: none"> - The lack of policies and guidelines for supporting SpLD students in middle school - Poor levels of consistency between SEN teachers about diagnostic tests and working mechanisms * Institutionalizing PT (direct involvement of the MoE): <ul style="list-style-type: none"> - A call among two SEN teachers and one SEN supervisor to make PT compulsory as this might encourage the MoE to take an active role in improving the current practices of this approach

The relationships outlined in the dimensions above can be explained in terms of a series of potential interactions in a representative classroom. The guidance from the SEN teacher (*rules*) outlines the roles of pupils in PT sessions (*division of labour*). This creates a structure in which a peer tutor (*subject*) provides support to a student with SEN (*object*), utilising classroom resources, such as pens or books (*tools*), to develop the skills of the SpLD student (*outcome*). The success of this PT system can also be affected by the provision of the required facilities or support, in terms of monitoring or assistance from the school administration or mainstream teachers (*community*). Given the high degree of interconnectedness between dimensions, it was necessary to analyse all factors to understand any contradictions in PT activities, and thereby ensure their validity as development strategies (Engeström, 2008).

4.2 Subject

This dimension pertains to all people involved in the implementation of PT: mainstream students (peer tutors), SpLD students (peer tutees), SEN teachers and SEN supervisors. It was important to investigate the ways in which these essential actors understood this teaching approach and its place within the context of Saudi schools, in order to determine how their understanding might influence or differ from their practice.

4.2.1 The meaning of peer tutoring

Teachers, supervisors and students (tutors and tutees) were questioned about their understanding of the term ‘PT’. This approach was generally understood as a unidirectional teaching method providing teaching and support in a linear direction, from mainstream students to students with SpLD. Most teachers and supervisors agreed that students with SpLD always require support. One

SEN supervisor commented: “PT means that one student is the leader, she should be excellent in the subject to provide help and support to the student with SpLD” (SS4). Another SEN teacher supported this perspective:

Noha [SpLD student] does not talk or interact in the classroom, or even with me. Her teachers [mainstream teachers] are complaining about her and said that she is not participating or answering the questions. Ok then, I was thinking what can I do to her? I am here [in the learning resource room] not in the classroom, but I still have a role with her. So I decided to assign one student to help her. I asked for a list of names of the excellent students... and then I told her [SpLD student] that I am not with you in the classroom, so you need someone to help you to understand... to clarify and simplify the information for you (S3ST8).

Under this broad understanding, participants expressed two main stances on PT. First, PT was perceived by six of nine SEN teachers and two SEN supervisors as a teaching method in which mainstream students have the same roles as the classroom teachers, making them a “small teacher” (S6ST1) (S5ST7) (SS4), “teacher assistant” (S6ST2) (SS3) or a “shadow teacher” (S2ST6). They referred to the notion of teaching within PT by using the Arabic concept *Musa’adah*, which refers to the provision of help, support and assistance. In English, the word ‘help’ means to “make it easier or possible for (someone) to do something by offering them one’s services or resources” (Oxford Dictionary, 2010, p. 816). This definition could imply that tutors were helping SpLD students to learn by playing a facilitative role during PT activities. Yet, teachers clarified the nature of *Musa’adah* in this study by using the following Arabic concepts: *Tawsil Almaloumah* “delivering the information” (S5ST7) and *Sharh Aldourous* “explaining the lessons” (S6ST1). These concepts are in line with the archaic definitions of PT that

emphasise the dominant role of tutors in transmitting knowledge to tutees (Topping, 1996). One teacher said:

PT means that the SpLD student is dependent on receiving information from her colleagues not only from her classroom teachers. This means that the SpLD students is receiving information from her colleagues who are closer to her than me. This makes her more comfortable to ask a question. Sometimes the SpLD student can be afraid and hesitant to ask the teacher or to say that she did not understand, but she is more comfortable about asking her colleague. The small teacher [peer tutor] is more able than the teachers to understand how her colleague thinks. Some of the teachers cannot get down to the level of the student, but the students can understand their friends and know where their problems are (S4ST5).

All students with SpLD shared this understanding of PT, viewing their tutors as versions of classroom teachers, with the corresponding responsibility to help them learn what they did not understand. In this context, SpLD students stated, “PT means explaining... the teacher [classroom teacher] does not explain when she teaches” (S2Ss6), “she [peer tutor] explained the difficult things, and then helped me to answer the homework” (S1Ss25), and “if I did not understand the teachers’ explanation, Reem [peer tutor] will make me understand” (S1Ss28). Similar views were expressed by more than half of the peer tutors: “my role is to teach Huda and help her with anything she did not understand” (S4MS24) and “we explain the lessons to the student with SpLD and make her understand” (S4MS20).

Secondly, three of nine SEN teachers and two SEN supervisors perceived PT as a friendship between SpLD students and their partners, although they argued that peer tutors should not be called teachers, rather that they should

be “an excellent student, academically and personally, who is chosen to be a supportive friend to a SpLD student academically and psychologically” (SS3) (SS1). The term ‘friend’ was selected to encourage SpLD students to collaborate with their peer tutors: “I told Abeer [SpLD student] that Dalal [mainstream student] is your friend in the classroom, so let her help you, let her be your consultant... consult her in the lessons and with any homework that you need help with” (S1ST3); and to encourage peer tutors to participate in PT: “the ‘friends of SpLD programmes’ [peer tutors] is an important reinforcement for them” (S1ST4). Another SEN teacher stated that tutors should not be referred to as teachers, because they should not take full responsibility for explaining lessons to their tutees as done by the classroom teachers. “I told the student [peer tutor] to look at your friend’s needs, do not explain everything so she does not get dependent” (S5ST9). This means that mainstream students were only assigned to teach the lessons in which students with SpLD encountered difficulties.

The perception of PT as a supportive friendship was only expressed by two of the eighteen mainstream students. One student refused to be called a teacher and said that, “when I help her [SpLD student], I treat her as a friend not as a learner and a teacher... I cannot be a teacher, the teacher is older than me and is more knowledgeable” (S2MS9). The other asserted that PT was collaborative in the sense that her role was to “help SpLD students when they cannot understand classroom teachers because they might understand from their friends more” (S1MS27). These comments suggested that despite recognising their important support role, some students preferred to play a secondary classroom role that supported the primary educational role played by teachers.

Only one SEN supervisor mentioned the notion of homogeneous PT, in which SpLD students act as tutors for other SpLD students, citing their frustration: “if we assign a normal student to teach her, her self-esteem will remain low,

while if we ask her to teach and give her the role of leader, her self-esteem will increase” (SS2). She added that, “the role of a normal student is to be a supporter for PT” (SS2). However, the challenges inherent in grouping SpLD students resulted in the perception that this style of teaching was impossible in the current school environment (SS2). She therefore suggested:

Establishing a secret classroom for all SpLD and other weak students [who are studying at the same grade]; two SEN teachers should always stay in the classroom and no one, even mainstream teachers, should know that this classroom for SpLD students exists, except SEN teachers and the headteacher (SS2).

In summary, PT was understood as a teaching method that offers support in a unidirectional, linear way. Two perspectives emerged in terms of the nature of the relationships between students: one situated within the traditional hierarchical model of teaching, which viewed peer tutors as secondary teachers and therefore accorded them similar responsibilities to the classroom teacher; and one that describes tutoring within the context of peer interactions, with tutors helping their friends. Importantly, only one SEN supervisor called for the introduction of homogeneous PT in schools.

Having looked at the subject (meaning) of PT, the next section examines the object (aims) of this particular peer-centred teaching methodology.

4.3 Object (Aims) and Outcomes

The second and third dimension of PT activity is the objects and outcomes of the activity system. Those directly responsible for introducing, designing and implementing PT, namely the SEN teachers, SEN supervisors and students, were asked about their perspectives on the aims of PT in supporting SpLD students. Direct questions also explored the effectiveness of support provided

in specific areas of interest, looking primarily at academic, social and emotional development. There was a general consensus among participants, who believed that PT was an effective strategy in the promotion of learning, to varying degrees. This agreement related to the fact that PT was mainly used to solve-problems related to the lack of subject- specific knowledge among SEN teachers. However, while the majority of the SEN teachers and SEN supervisors claimed that PT was effective in fostering inclusion and enhancing social and emotional skills, the students expressed much less uniformity in their responses. Although some students stated that PT was effective, some held a neutral view, and some claimed that it was ineffective. These different perceptions related to the lack of awareness among students concerning the socio-emotional aims of PT.

4.3.1 Academic development

SEN teachers in Saudi Arabia are required to support SpLD students with any subjects that they find difficult. All participants agreed that the primary aim of PT should be to deliver the required academic support for students with SpLD with any curriculums that they found difficult. Hence, PT in this study was not contained within one subject, as SpLD students were receiving support in a range of subjects, including mathematics, science, history and Arabic language. The majority of participants expressed the opinion that the academic aims of PT were the provision of supplementary explanations and clarification for lessons in mainstream classrooms, as well as providing supervision and assistance to SpLD students in completing classwork and homework. Most SEN teachers stated that PT could be a useful way to ensure that students with SpLD were properly prepared for exams, through increased support in revision weeks. These applications, as well as more explicit statements, indicate that teachers and supervisors primarily considered PT as technique for solving the problems faced by SEN staff. All teachers in this

study noted that there were problems moving from primary school to middle school, the most significant of which is ensuring sufficient competence in all subject areas: “honestly, we are not prepared for all the subjects... by implementing PT we can overcome this problem” (S1ST3). The primary explanation for this lack of subject mastery was insufficient training provided to SEN teachers on middle school curriculums. All SEN teachers in this study had a bachelor degree in SpLD from a Saudi university, although these teaching courses (at the date of this study) only provide training on how to teach basic learning skills that are covered by primary school curriculums and have not been updated to equip teachers with the required knowledge and skills for instruction of middle school subjects. According to one teacher, “we are just prepared to teach the basic skills, such as multiplication, division, addition and reading small numbers, I do not want to teach... something wrong” (S2ST6). In this regard, one of the SEN supervisors explained that many teachers refuse to work with middle school students due to the feeling of insufficient preparation “at university level on how to deal with students at this stage” (SS1).

Changes to the curriculum were also cited by three of nine teachers as an explanation for the general lack of subject mastery among teachers. For example, “I am not skilled to teach mathematics and actually the curriculum has been changed, so it is not what we have learned” (S5ST9). One SEN supervisor supported this statement, asserting that “the fear is about specialism, so I cannot force them, as a supervisor, to understand the curriculum. The curriculum has been changed and developed” (SS3). The new national curriculum differs from previous iterations in terms of content and the style. The names of the subjects have been changed, some lessons have been modified or removed, and new lessons have been added. The new curriculum is also more colourful, including visuals and a summary of lessons to attract the attention of students. These changes have resulted in some

teachers having a non-optimal understanding of certain subjects, increasing their reliance on students. For example, five of nine teachers reported that they often seek support in the teaching of science subjects that they do not understand well. This was supported by statements including: “there are many things in science subjects at the middle school stage that I do not know, so I have to learn them myself, search the internet or ask for help from the students” (S5ST7); and “they help me to teach science which is difficult for me to understand” (S1ST4).

Another reason given by teachers for deciding to utilise PT was the work pressure at middle school, with many more subjects to teach and more onerous paperwork to prepare. Half of the teachers asserted that their responsibility for a large number of subjects in middle school was a major challenge to their ability to support students with SpLD. “My previous work in primary school was different... I am now responsible for supporting my students in all the subjects” (S5ST9). All teachers also expressed their anger and their feelings of frustration regarding the amount of paperwork required. “I have to work on many of the students’ files... I also have to check their answers on the books of each subjects” (S1ST4).

When questioned about their perceptions on the effectiveness of PT, all SEN teachers and the majority of SEN supervisors agreed that PT was effective on the subject of the academic development of students with SpLD. The majority of participants expressed their belief that PT had a positive impact in three main areas. The first of these was improving student performing and levels of achievement, with PT being credited for helping SpLD students to “answer any questions about the topics that were explained by the peer tutors” (S3ST8). One SEN teacher argued that it also improved the ability of students to memorise information: “PT helped students widely... in just two PT classes she was able to memorise what she could not memorise during a week” (S2ST6). Furthermore, three of the nine SEN teachers had observed that PT

had helped SpLD students to achieve higher grades in exams. One SEN supervisor even commented that “PT improved the academic performance... and helped SpLD students to understand the lessons” (SS1).

The second positive aspect of PT concerned the improvements that it made to the motivation of students. Almost all SEN teachers noted that student attitudes towards learning improved and more than half commented on declining absenteeism (S6ST1), adding that “they know that there is someone who will help them even if they did not complete their homework” (S3ST8) (S6ST1). Furthermore, two of the nine SEN teachers added that PT improved students’ motivation by changing their negative attitudes towards learning, such as with mathematics: “I saw her answering and she has a better attitude towards the subject” (S4ST5) and so “they come themselves without anyone telling them to come” (S5ST7). This was supported by nearly half of the SEN supervisors. One said, “PT highly contributed to the increased in students’ [SpLD students] awareness of their abilities” (SS4).

Five of the nine SEN teachers commented on the third positive aspect, namely increased classroom participation. “I noticed the difference after implementation of PT... now she is not just receiving the information but also trying to show all the work she did” (S4ST5) (S6ST1). Another SEN teacher added that active participation was evident in classrooms, especially when “their friends keep encouraging them to participate by saying ‘participate, answer, you know the answer’” (S3ST8). Examples were also given of increased involvement in extracurricular activities, such as presentations made during school festivals (S6ST1).

The results revealed that when students felt comfortable with their peer tutors and had the opportunity to model their behaviour, supplemented by comprehensible classroom material, that PT was an effective strategy for facilitating the learning of SpLD students. Three of the nine SEN teachers

believed that PT provided an opportunity for SpLD students to learn new skills and appropriate behaviour through the imitation of their tutors. One SEN teacher claimed that, “students gain new skills when they see excellent students sitting with them, they try to work hard to be like them... they become more enthusiastic to study in order to gain higher grades like their friends” (S6ST1). Another SEN teacher noted that PT had helped some SpLD students to “leave bad gangs who were lazy and just playing... and had a negative impact on students’ motivation and their attitudes towards school... and be like their friends who care for grades, work hard and respect their teachers” (S6ST2). Furthermore, more than half of the SEN teachers and nearly half of SEN supervisors reported that the closeness between tutor pairs had created a comfortable atmosphere, helping SpLD students to understand their lessons better and encouraging them to ask for clarification when required (SS3) (SS6). “SpLD students feel more comfortable asking their friends, they are sometimes afraid to ask their teachers, they hesitate to say ‘I do not understand’” (S4ST5) (S1ST3). Additionally, half of the SEN teachers mentioned that peer tutors convey information in simple terms and that this facilitated SpLD students’ understanding: “some teachers cannot descend to the student’s level, but the friend can understand her friend’s problem and can help her by using simple methods” (S3ST8) (S6ST2).

Similar responses were given by most students (tutors and tutees), who confirmed the aforementioned benefits of PT. First, almost all mainstream students observed that PT had improved the academic performance of SpLD students, especially in complex subjects like mathematics. For example, “she [SpLD student] did not know how to multiply and divide like other students, but now she is doing better” (S2MS11) and “now she can see the word and write it down much more quickly, also her reading is better” (S3MS33). Many of the mainstream students added that their tutees sometimes managed to answer the exercises in classwork and homework without support (S1MS27).

Additionally, half of the mainstream students noticed that SpLD students who had studied on the peer tutor programme now obtained better grades in their exams (S2MS9).

The majority of SpLD students supported these views, asserting that PT had enabled them to “read more quickly than before” (S1Ss30) and to “understand difficult mathematics lessons” (S6Ss4). They attributed these developments to three main reasons. Firstly, their partners simplified the information and explained lessons through clear, simple teaching methods, which helped them to understand. “I understand the lesson from my friend more than the teacher because my friend... knows how to deliver the information using a simple method” (S1Ss28) (S2Ss8). The second reason for improved understanding was due to individual teaching and the provision of sufficient time to understand and practice, rather than classroom teachers, who may “have a specific time limit, so if they start to teach they say those who did not understand have to understand themselves” (S5Ss18) (S2Ss6). Thirdly, the tutees felt able to ask their tutors for clarification:

Sometimes the teacher [mainstream teacher] is explaining many things [lessons], so it is difficult for me to interrupt her in the middle of an explanation and ask her to repeat what I did not understand... PT is important because sometimes I have questions about something I did not understand and I cannot ask the teacher personally, but I feel happy to go to the girls [her colleagues] and ask them to explain these things to me (S1Ss30).

Second, most mainstream students asserted that the motivation of SpLD students had visibly improved after participation in PT, with many even displaying positive attitudes toward learning. Mainstream students made several comments on this topic: “she [SpLD student] is more enthusiastic. She asks me if she does not understand and sometimes even helps me and asks me

to pay attention during the lesson” (S4MS24) (S2MS7) (S5MS23). More than half of the SpLD students also stated that they felt more motivated, because of the support and encouragement of their peer tutors: “she [peer tutor] really changed me... she told me you have to read the Qur’an. In the past, I was not able to read the Qur’an. I failed this subject, but she helped me and said you have to pass, and I passed” (S6Ss3). Another SpLD student recounted that “before I had no motivation, even the teacher blamed me because I could not read, but she [peer tutor] told me ‘take your time’ and I managed to read with her” (S4Ss21). Two of the eighteen SpLD students attributed their increased motivation to their ability to understand their peer tutors more easily than their classroom teachers, with one SpLD reporting that “I understand from her but do not understand from the teacher” (S3Ss36).

Third, the majority of mainstream students recognised that continuous support and reinforcement had increased the participation of SpLD students in the classroom. Two student noticed that, “she [SpLD student] sometimes hesitates to raise her hand, so I always tell her [SpLD student], ‘raise your hand, answer the question, you know the answer’ and she has started to participate and search for the answers” (S4MS16) (S4MS15). This claim was supported by SpLD students, who noted that their peer tutors encouraged them to be brave and participate: “even if I feel shy, she makes me stand up and answer” (S6Ss1) (S1Ss30).

4.3.2 Socio-emotional development

The results revealed a range of different perspectives on the aims of PT regarding socio-emotional development. SEN teachers and supervisors expressed different aims than students (both tutors and tutees). A large number of SEN teachers and SEN supervisors recognised that PT programmes play a role in the socio-emotional development of students with

SpLD. However, when students were asked about the aim of PT, their answers almost exclusively concentrated on academic objectives.

In terms of social skills, most SEN teachers and supervisors believed that PT has been an effective way to support SpLD students socially, primarily through the process of facilitating the making of friends and improving their communicative abilities:

SpLD students were enclosed within themselves, but now I can hear new names, new names have been included in their group [...] some students before were silent but now they are talking and listening to other students, they are better, much better now (S4ST5) (S1ST3) (S5ST9) (SS3) (SS6).

However, interviews with mainstream students uncovered a range of opinions concerning the previous skills. For example, six mainstream students claimed that PT had helped SpLD students to become “sociable” (S4MS17) and more likely to “sit with other students” (S6MS5). They also managed to make new relationships with other students (S3MS34) or communicate more easily with teachers (S1MS29). These improvements in social competence were attributed to the encouragement and opportunities gained from the mainstream students, such as insight into how “to make friends, to gain information from others, I give them advice” (S4MS24). Another six mainstream students argued that PT did not usually help tutees to improve their social skills, because SpLD students are “shy” and “have a fear of social relationships” (S2MS9), leading them to “prefer to sit alone” (S2MS7). The remaining mainstream students already had their own friends and therefore held a neutral view, not having noticed any social effects of PT on SpLD students.

These opinions were largely mirrored in interviews with SpLD students. Eight of the eighteen SpLD students asserted that peer tutors had helped them

to make new friends, as well as having introduced their own friends to them. However, six SpLD students asserted that their peer tutors “mainly focused on studying” (S2Ss6) and so did not develop their social skills. The students with SpLD were aware that their shyness and social awkwardness could exacerbate this situation (S2Ss25). The remaining SpLD students already had their own friends and so had not noticed any social development effect from the PT programme.

Furthermore, all SEN teachers and the majority of SEN supervisors stated the belief that PT fostered inclusion, at least to a degree, by helping students to socialise with others. It is important to note that inclusion is conceptualised within Saudi SEN policy documents with the Arabic word *Damg* to reflect the development of inclusion policies and practices in the west, mainly in the USA. Inclusion aims to ensure the right to participation of all children within mainstream schools, regardless of their disabilities. This can be achieved by preparing mainstream schools to accommodate the individual needs of all students with and without SEN and to enhance a sense of belonging (Avramidis and Norwich, 2002). However, official Saudi documents define *Damg* as “teaching students with disabilities in mainstream schools and providing them with SEN services” (MoE, 2014a, p. 7). This definition is more associated with the notion of integration, which aims to provide support for students with disabilities in the least restrictive environment. In this study, participants believed that PT fosters inclusion by enhancing social integration, particularly by encouraging SpLS students to communicate with their typically developing peers and thereby changing negative attitudes towards these students.

Three SEN teachers noticed that, after implementing PT, “SpLD students became members of different groups of normal students [mainstream students], they met them and talked with them during break time” (S5ST9). In this way, the PT programme helped students build relationships between

the two participating students, as well as with their extended social networks (SS4) (SS1). This was extremely value for SpLD students, because they were not always able to “build successful relationships... she feels that she is lower than the others, other students also exclude her because she is not excellent” (S5ST7). As a result, students with SEN often secluded themselves away from other groups. However, one SEN teacher noticed the potential for PT to increase involvement in extracurricular activities: “now Rana has become a member in a group, and Huda with another group, and Sara with a different group, they are included with other classroom students” (S4ST5).

Approximately half of the SEN teachers noted the impact of PT on the negative attitudes of some students towards peers with SpLD. One teacher stated: “I had a student who failed two years at grade seven, so when I asked the students ‘where is Mona?’, they said ‘the failure, the failure’” but after a period of PT, “all the classroom changed their way of seeing Mona, they started to respect her” (S2ST6). As a result of the shift in attitudes and increased awareness, some SEN teachers had observed more mainstream students becoming keen to help on the SpLD programme. One SEN teacher spoke about how the classmates of a girl changed their minds and volunteered to help, stating “she [SpLD student] failed two years and they want her to pass this year” (S5ST7). However, two of the SEN teachers claimed that some mainstream students volunteered to help SpLD students in order to receive reinforcement and rewards: “they became enthusiastic when they saw me reinforcing Suha and gave her a reward, they came to me and said ‘she [SpLD student] has an exam on Sunday’ or ‘I wrote the schedule for her’” (S6ST1). In addition, some mainstream students wanted access to the comforts prepared for the PT programme:

I have an attractive environment, so the girl who is a friend of the SpLD student is the beneficiary, our SpLD students are princesses here. That means the students who are their friends will come here

[learning resource room] and have a beautiful place to study. I have coffee and a reinforcement corner. We did a lot of things for this [PT] (S1ST4).

From the perspective of the learners, many mainstream students were neutral about the effects of PT on inclusion and four argued that it was not an effective strategy, because of negative attitudes towards students with SpLD. One mainstream student reported that “she [SpLD student] is my friend, I do not want to leave her alone, no one trusts her, no one likes her, no one thinks about her” (S4MS15). Another proposed barrier to inclusion was the difficulty that many SpLD students had in communicating with other students, with one tutor stating that “she [SpLD student] does not like to be with other students, does not want to walk with my friends, and if she walks with us, she does not talk that much” (S6MS5). More than half of the SpLD students agreed with these reasons for stating that PT did not foster inclusion. On this topic, SpLD students added that some other students perceived them as lazy “and when they saw me raising my hand to answer, they became shocked and asked me how I knew the answer” (S6Ss3) or unlikeable: “after Huda [peer tutor] sat with me, other students started to come. They came to Huda not me, maybe because I did not communicate with them” (S1Ss25).

On the subject of emotional support, most SEN teachers and supervisors claimed that PT resulted in SpLD students displaying increased levels of confidence, because they “feel worthwhile, that there is someone who cares for them” (S6ST1) (SS4). This was especially important in cases where there was a lack of parental care (SS6). Another SEN teacher added that their “confidence improved because they saw that the best student in the classroom is sitting with them and helping them... because there is a belief that excellent students do not sit with the weak students” (S5ST9).

Three of the nine SEN teachers reported certain important benefits that resulted from increased student confidence. The first of these was the improvement in academic performance and communication skills. One SEN teacher stated that her student:

Is better, talking with other students, engaging with other students in the classroom, listening to other students, without these girls [peer tutors] I would not be able to do anything... she is now trying to talk, you can hear her voice, she has even started to read and write more quickly than before (S3ST8).

The second benefit was in the provision of help and support to other SpLD students, with one SEN teacher noting the example of her student, “who had some severe developmental difficulties, her memory is bad, she could not read, her reading was bad, she had a stammer... she is now helping and teaching two SpLD students who are weaker than her” (S1ST4).

The third benefit was the improvement in the participation of students with SpLD, as in the case mentioned by one SEN teacher, who “had a student who had a stammer... now she is participating with them in the classroom activities, she is participating in everything” (S6ST2).

For students, more than half of the mainstream pupils held similar views on the effectiveness of PT in improving the confidence of students. Two of the students underlined the importance of providing opportunities for SpLD students to express their opinions, arguing that this helped to improve their self-assurance: “confidence is good; I am trying to help her. When she talks to me, I give her a chance to talk. I get involved in the conversation. I talk and listen to her” (S4MS24) (S6MS5) (S3MS34). Other mainstream students claimed that praising SpLD students and giving them opportunities to speak increased their confidence, stating that “when I started to teach her and tell her that ‘you are excellent’, she got excited and started to have confidence in

herself that she can study alone” (S5MS37) (S4MS15). This increased confidence and development of communication skills, manifesting in more opportunities taken to ask for help and engage with others: “now she does not hesitate to ask for help” (S1MS27) (S6MS5) (S3MS34).

Similarly, more than half the SpLD students agreed that they felt more confident and participative after taking part in PT. Three of the eighteen SpLD students attributed these gains to the advice and encouragement received from peer tutors (S3Ss35) (S5Ss22). A further two SpLD students added that this encouragement had improved their ability to communicate with other students, saying “before I could not speak loudly in the classroom, I could not ask any girl, I could not talk to anyone, but now it is normal” (S1Ss30). Four SpLD students stressed the importance of the academic support provided by peer tutors. This had helped them to understand the lessons, which then increased their confidence: “now I have confidence because I feel that there is someone helping me, I can now understand and study” (S4Ss21) and “since I met her [peer tutor], I have become excellent, which makes me feel confident of myself... I can study and answer the questions” (S2Ss12).

The majority of the SEN teachers and supervisors felt that PT played a role in the emotional development of students with SpLD by increasing their self-esteem. Two of the six SEN supervisors noted that the PT participation helped SpLD students to see more value in themselves and granted insights into their own difficulties (SS4; SS6). Three of the nine SEN teachers stated that, “they [SpLD students] became enthusiastic to come here [learning resource room] with their small teacher in their free classes, they are now willing to receive support and help” (S5ST7) and “now she has started to value herself and is not embarrassed to be a SpLD student” (S5ST9). Evidence of self-esteem was noted in the pride that the SEN students displayed of their work, with one SEN teacher recounting that her students “came to me and told me ‘we

answered this and answered this’... they used to have empty books and incorrect answers and did not want to show their work to others” (S4ST5).

Nonetheless, when asking mainstream students about other impacts of PT on the emotional development of SpLD students, different perspectives have been discovered. For instance, two mainstream students claimed that listening to their problems, showing empathy and offering advice or solutions may have given their tutees emotional support, saying “they [SpLD students] told me things that I will never say to other people... I then tell them, ‘no problem’ and comfort them” (S4MS17) (S3MS34). Another two mainstream students added that they help their tutees to stay calm, saying, “when I see that she is angry... ‘come to me, tell me if you have anything you want to say, do not worry, we can sit together and talk’” (S6MS5). Nevertheless, four mainstream students reported that PT was ineffective in improving emotional skills, because SpLD students “do not like to talk about their problems” (S2MS11). Additionally, more than half of the mainstream students stated that they could not decide on the effectiveness of PT in providing emotional support, because they did not offer this kind of support or ask tutees about their own problems.

SpLD students shared similar views on the effectiveness of PT in improving their emotional skills. Five of the eighteen SpLD students claimed that their peer tutors supported them emotionally, such as through empathy or advice: “sometimes I face something that makes me disappointed, she [peer tutor] comes to me and advised me and says ‘you have to face this thing’” (S1Ss28) (S6Ss1). Four SpLD students stated that PT had not improved their emotional skills, because peer tutors were “a colleague not a friend” (S6Ss3). Half of the SpLD students were neutral on the effect of tutoring on their emotional skills, because they did not talk about these matters to their tutors: “she [peer tutor] did not help me because I do not tell her about my problems. I do not want to bother her, so I keep everything in my heart” (S3Ss35).

The aim of this study was to examine how PT is understood and practised in six Saudi Arabian schools and its perceived effectiveness on SpLD students. PT was also found to provide emotional-religious benefits for peer tutors, with just under the half of the mainstream students stating that their participation in PT was intended to please Allah, who would reward them. Some tutors also perceived the PT in terms of friendship formation rather than a teaching arrangement, because it helped them to make new relationships with SpLD students. This strategy also emphasised the concept of collaborative learning among students who had learned that they could be an important source of support for their friends. This was especially important given that some students, especially those with disabilities, faced difficulties understanding mainstream classes and experienced alienation from their friends: “I do not want to leave her alone, no one trusts her, no one likes her, no one thinks about her... I want my name to be in her heart” (S4MS15). From this perspective, PT was not only instrumental in helping students to understand lessons, but functioned as an effective mechanism to address discrimination and offer a moral framework for personal growth through peer interaction.

The results indicated that PT was widely perceived as an effective method for the provision of academic support for SpLD students. PT has been associated with improvement in academic performance, motivation and participation of students with SpLD. Occasionally, PT was also found to benefit the mainstream students who served as tutors. Participants offered a number of justifications for this. However, students had different perceptions to SEN teachers and supervisors regarding the efficacy of PT in supporting social and emotional development. This could be a result of the tension identified between the SEN teachers and students concerning the objects of PT activities. When friction exists between the components of an activity system, this can cause tensions, which then influences the way, or degree to which,

the outcome can be met (Yamagata-Lynch, 2010). In other words, because of the friction between teachers and students, different perceptions might develop, affecting the outcomes of PT.

4.4 Tools

The next dimension to emerge from the data concerned the tools involved in the PT process, such as teaching aids and learning materials. The time and human resources required to implement PT were also important elements of this dimension. These included the criteria with which mainstream and SpLD students were selected for participation, as these are considered to fall within the ambit of human resources. These findings are subdivided into three main themes: physical, time and human resources.

4.4.1 Resources

The data showed that the physical environment emerged as an important factor, including the specific concepts of learning aids, classroom space, and educational equipment. While SEN teachers generally believed in the potential of PT to support their work with SpLD students, the lack of available time in the school day remained a major barrier to implementation. The recruitment of teacher assistants, SEN teachers and SEN supervisors to support PT also emerged as a concern.

4.4.1.1 The physical environment

The majority of SEN teachers, half of the SEN supervisors and more than half of the students perceived the physical environment of classrooms to be a barrier to PT implementation. Problems were identified with the buildings and available facilities, including furniture, equipment and educational aids. The most significant problem was generally perceived to be the lack of space

available for activities. As PT relies on the principle of collaboration between students, it is important to have access to classrooms of reasonable size in order to facilitate students' work. However, seven of nine teachers claimed that the space available to them was too limited. This meant that arrangement of classroom furniture to promote pair work or small group work could be difficult. Classroom furniture in all schools comprised desk-style tables and chairs, arranged to face the board and teacher. Therefore, one of the SEN supervisors confessed, "we need to create the environment for implementing PT, the environment that is prepared to suit collaborative work" (SS2). Moreover, just under half of the SEN students reported that they were not allowed to sit next to their peer tutors, directly hindering the implementation of PT: "my friend is sitting far away from me. It is difficult. I always have to go to her or sometimes she come to me. I hope that she comes to sit next to me" (S4Ss21). They explained that the classroom teachers separated them to prevent them from causing "noise" (S2Ss12) or to help them to "concentrate on the lessons" (S3Ss36), although this invariably complicated the process of offering peer support. Sitting in pairs, next to one another, was recognised by over half of the mainstream students as being essential for effective implementation of PT.

The large number of students in classrooms was perceived as a challenge to the operation of PT by just under half of the teachers and more than a half of the students (including mainstream students and SpLD students). Firstly, the SEN teachers noted that large class sizes could make it difficult for them to observe and supervise the tutoring sessions, adversely affecting their efficacy. One SEN supervisor explained this by saying, "there is a greater opportunity in private schools because there are fewer students in classrooms, so a teacher will know the weaknesses of students and which characters should be matched to each other. You will also be able to manage your classroom" (SS6). The other problem associated with large classes was that they cause

noise, which hindered clear communication, thereby preventing mainstream students from teaching or impeding the understanding of SpLD students. Teachers noted that PT activities were therefore commonly implemented during free time, either when the classroom teacher was absent or between classes. This made it more likely that sessions would be affected by noise, with two teachers asserting an inability to implement PT because of:

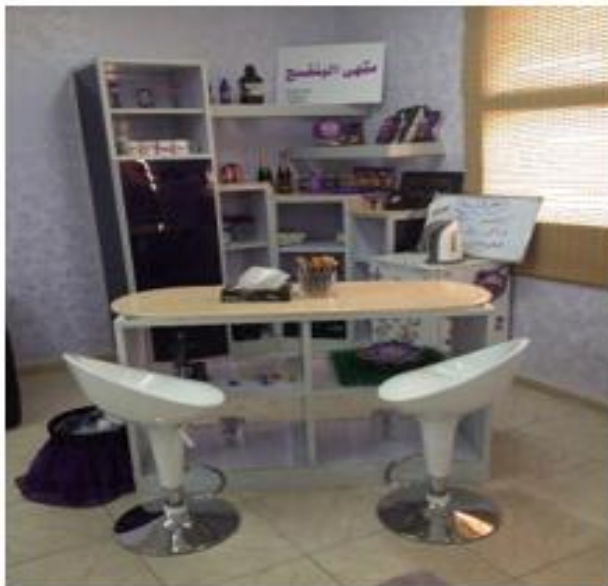
The large number of students in classrooms and the lack of classroom capacity. The number of students in each classroom varies from 30 to 35... Now my students are studying in classrooms which include 25 students, so now there are fewer students in classrooms which include SpLD students (S4ST5) (S2ST6).

The mainstream students also expressed dissatisfaction with the current situation in classrooms, stating that, “students in classrooms do not care about others” (S4MS15), “the classroom is noisy so I decided to teach in the learning resource room” (S3MS33), and “we really need a quiet room” (S6MS2). These views were also held by the SpLD students, who said that noise often prevented them from understanding. This reinforced the importance of a quiet environment for effective sessions.

The resource room, or ‘the support and consulting’ room as it was termed in five schools, was a space that has been designated for SpLD to receive remedial lessons and extra support from SEN teachers. The size of the resource rooms differed significantly between schools. The resource room in School 1 was spacious, attractive and well arranged, containing four separate study areas (*‘arkan’* in Arabic), with an additional area for coffee (see Figure 4.2). Students in this room were rewarded by being allowed to spend time in the coffee area to relax, while drinking and eating some of the snacks that are available there. However, the local SEN teacher commented, “I decorated this

room with my colleague last term at my own expense” (S1ST4). Nevertheless, the SEN teacher had been keen to create an attractive environment for SpLD and mainstream students, based on the belief that it would “encourage SpLD students to come to the room and change the negative attitude among other students towards students with SpLD... encourage other students to come and support their friends” (S1ST4). She added that she had changed the design of the room before, but was helped by the decision of her school to take part in the King Abdullah project (*Tatweer*, which means development) and the extra funding that they had therefore been allocated (S1ST4).

Figure 4.2 Learning resource room in School 1



A similar picture emerged of the resource room in School 2, which was smaller than the room in School 1, but well appointed. It included three study

areas, two of which were partitioned for privacy. The room also had a small library with two chairs and a reward area, containing some gifts for students (see Figure 4.3). The SEN teacher in this school commented that she was “satisfied with the financial support received from the MoE”, although she conceded that the furniture and the library had been provided at her own expense, “which is fine since the essential things are already provided” (S2ST6).

Figure 4.3 Learning resource room in School 2



In contrast, the SEN teacher in School 3 expressed extreme dissatisfaction with the small size of the room (see Figure 4.4), with a single study area containing a U-shaped table and four chairs:

My room in the previous school was very big. I was able to teach while peer tutors were teaching their friends with no problems. They had their own board, pens and teaching aids. They could open the door and come in at any time, they knew their places in the room (S3ST8).

Although the room was originally larger, it had been sub-divided in order to accommodate an office for the school counsellor.

Figure 4.4 Learning resource room in School 3



Although School 4 had a reasonably sized room, it did not seem to be appropriate for PT activities, because it was full of tables, chairs and disorganised clutter, such as files (see Figure 4.5). School 5 had also a large room but was not arranged in a way that created different study areas (see Figure 4.6). It was also dusty and unpleasant, making it uncondusive to study. The SEN teacher commented that “the first time I came to this school I found the room locked and the key was lost... After one week, they found the key. The room and its equipment was covered with dust, and up to now the room has not been cleaned regularly” (S5ST9). Finally, the resource room in School 6 was able to accommodate two SpLD teachers and three pairs of students. No effort had been made to arrange the room to better facilitate tutoring, such as creating different study areas (see Figure 4.7), although the SEN teacher recognised the need to “divide the room in order to fit in the largest possible number of students” (S6ST2).

Figure 4.5 Learning resource room in School 4



Figure 4.6 Learning resource room in School 5



Figure 4.7 Learning resource room in School 6



The MoE supplied the resource rooms with standard furniture, such as U-shaped tables, chairs, a desk for the SEN teacher, and cupboards for the storage of educational aids or teaching materials. Teachers could request additional furniture from headteachers, who would then inform SEN supervisors about the requests, with the supervisor placing an order to the MoE. However, teachers reported problems with late delivery or incorrect quantities of furniture, citing the negligence of others in the requisition chain. For this reason, several SEN teachers confessed to preparing the rooms at their own expense, while others endured working with the available furniture. One SEN teacher in School 6 suggested that the minimum required was sufficient access to “a desk and a special corner prepared for peer tutors to work in” (S6ST2).

The MoE also supplied the resource rooms with standard equipment, such as a computer, a printer, whiteboards, a projector, a TV screen, a smart board, and camera documentation. Nonetheless, not all schools were sufficiently equipped with modern technological devices. For example, School 3 had only a computer and printer, leading one mainstream student to say that, “we need more tools... for example, a projector” (S3MS34). In addition, one of the SEN teachers in School 6 commented that, “we need to have more devices to support PT. For example, a laptop for the peer tutor and a printer” (S6ST2). During the observations in this study, I noted that many modern devices were not activated by teachers in a number of schools. For example, the TV screens in Schools 5 and 6 were on desks, covered in plastic bags and had not been connected. The teachers reported that “no one came to connect it” (S5ST9) and that they did not perceive them as useful with their students (S5ST7).

On the subject of educational aids, all SEN teachers agreed that these were not provided by the MoE, so they had to either design or buy them, at their own expense. During the observations, I noticed that the number and type of stored educational aids varied considerably between schools, with the majority of schools (four of six) having few or no aids. Only two of nine SEN teachers agreed that access to educational aids can provide meaningful support to the implementation of PT, saying “we do not have any educational aids to improve learning... Peer tutors can also benefit from them in their teaching” (S5ST9). This view was also expressed by two of eighteen mainstream students, one of whom commented that, “I need to have educational aids to use them in my teaching... if there is, for example, a game which facilitates the lesson such as a multiplication table as a story, she will understand” (S5MS37). No students with SpLD mentioned that the lack of educational aids adversely affected the implementation of PT.

However, there was almost unanimous agreement among SEN teachers that the practice of rewarding peer tutors is vital to PT. They claimed that this

encourages tutors to support their friends more effectively. This belief resulted in more than half of the teachers providing rewards at their own expense. Figure 4.8 shows a rewarding card (coupon) which has been printed at the SEN teacher's own expense. Students who collect a certain number of coupon are allowed to have free food or drink from the school. This tactic had been noticed by one of the SEN supervisors, who said that, “there is no financial support provided by the MoE, especially for PT... Most of the schools that you are going to have furniture that has been provided personally” (SS3).

Figure 4.8 Rewarding card (coupon) for peer tutors



4.4.1.2 Time

More than half of all students, all SEN teachers and half of the SEN supervisors agreed that time was a major obstacle to the effective implementation of PT. Time was constrained by numerous factors, including the duration of lessons and scheduling issues. The data showed that PT in all schools tended to occur during free classes (when the classroom teacher was absent), at the end of each class (if the lesson finished early), between classes (if the classroom teacher did not return immediately), or during break time. Many of the students commented on their difficulties in finding time to tutor

their peers: “I help her in a free class. We come here [learning resource room] and open the books and I start to explain what she did not understand” (S1MS26) (S6Ss3) (S3MS33) (S6MS5).

More than half of the mainstream students expressed dissatisfaction with this situation: “time is a major barrier, sometimes we do not have free classes when Hind does not understand something and I cannot explain it to her” (S2MS7) (S1MS26), “time is sometimes a problem because I need time to understand the question, to explain the answer to her and time for her to understand” (S3MS34). This was also recognised as a problem by half of the students with SpLD, who made similar comments and added that, “we need more free classes; it is really difficult to find one free class per week. We usually only have one or two free classes per week” (S3Ss36). Another student explained how she and her tutor tackle this problem, “she [her tutor] explains to me during free classes and if there are not enough, she explains via mobile, for example, by using video at home” (S2Ss8).

The findings show that PT was not regularly integrated into mainstream classes. However, one mainstream teacher in School 4 had recently implemented CWPT in all of her mathematics lessons, in an attempt to improve academic outcomes for all students, not only those with SpLD. Nonetheless, time constraints were still found to be a barrier by some students, who stated that, “if there is a difficult mathematical question that requires an understanding of the rule, you will need time to understand it and you will need time to make her [her tutee] understand” (S5MS23). This may be due to the large number of questions that classroom teachers have to complete with students, as was noticed during observations. It may also be a result of the difficulty that peer tutors can face when attempting to explain ideas or knowledge that they have encountered for the first time. As a consequence of this, the only students who did not perceive time as an

obstacle to PT were those pupils whose teachers were often absent, as this gave them many opportunities to implement PT during their free classes.

Similarly, while the majority of SEN teachers seemed to believe that PT could support them in their work, by providing more time to fulfil their job commitments, they also argued that scheduling issues deprive students of time to conduct PT. One SEN teacher commented that, “students have lots of subjects to study... and they do not have sufficient opportunities for teaching their friends” (S4ST5). Many students agreed, explaining that scheduling issues and work pressure often prevent them from training and supervising their tutees. For example: “our schedules are simulated, we do not have fixed schedules, and we do not have a specific time for us, we lack stability, we take students during free classes and when mainstream teachers collaborate with us” (S2ST6) (S5ST7).

Half of the SEN supervisors also agreed that scheduling issues are a significant barrier to PT, asserting that, “schedules are a big barrier honestly... When can I take them out to implement PT?” (SS4). Another supervisor made the important observation that, “it is really difficult for a SEN teacher to implement PT. It would be much easier for mainstream teachers, because they have all the students in the classroom all the time” (SS5).

4.4.1.3 Human resources

On the subject of human resources support for PT, there was a call from many participants for teaching assistants (TAs), additional SEN teachers and SEN supervisors. Three of nine SEN teachers stressed the need to introduce TAs in their schools because of the difficulties being experienced by mainstream teachers when dealing with the large class sizes in middle schools. As one SEN teacher commented:

The number of students is between 35 and 40 in each classroom, and the lesson time is just 45 minutes! How can we give each student what they deserve? This is the biggest thing that weighs mainstream teachers down. We also have many classes. If we had 45 students in just two classes in grade eight, that would be fine, but we actually have five classes in grade eight, another five classes in grade seven and another five classes in grade six, so this causes fatigue to the mainstream teacher. She can deliver the lesson and let's say 25% of the students (actually, to not make a mistake, let's say 50% of the students) understood the lesson, that means that there are 50% left who do not. This includes students with learning difficulties, and slow learners, and those with attention disorders, who all need extra work from the teacher in order to help them focus on their tasks (S2ST6).

As a consequence of this situation, the SEN teachers recommended that TAs, "can support mainstream teachers... and can help to observe the progress of PT activities in classrooms" (S6ST2).

SEN teachers were asked whether co-teaching could be as supportive as TAs. This approach was recently introduced in programmes for students with LD, requiring SEN teachers to attend mainstream classrooms to provide extra support for SpLD students. More than half of the SEN teachers replied that co-teaching tended to be an "unsuccessful experience", because mainstream teachers "did not accept it and felt that it is a kind of inspection" (S6ST1). Another SEN teacher commented that her SpLD students refused co-teaching teaching, because "they felt embarrassed... a teaching assistant would be more acceptable to students because she has to give attention to all students" (S6ST2). Nevertheless, one SEN teacher also conceded that introducing TAs was unlikely to be an effective solution, because of the small classroom size

and the large number of students, with the corresponding limitations on mobility (S1ST3).

Just under half of the SEN teachers said that another special education teacher would be a welcome addition to their school to alleviate some of their work pressure and paperwork, which prevented them from training students and supervising PT:

I have 12 SpLD students who need to be helped in different subjects, along with the large amount of paper work that needs to be completed. There are different classrooms in which PT is being implemented but I do not know to whom should I attend, should I attend to the good peers to reward them or those who do not implement PT appropriately, to train them? (S4ST5).

The schools that had two SEN teachers rather than one provided a useful insight into collaboration. Those SEN teachers all stated that having a colleague is beneficial, because it enables them to “go outside of the resource room to meet students” (S1ST3). Therefore, they felt that having an additional colleague who did not have specific responsibility for 12 students would help further (S1ST4). However, most SEN supervisors seemed to be satisfied with the situation, believing that recruiting more SEN teachers would not improve the implementation of PT (SS1). These arguments were based on the belief that the scheduling of students is the main obstacle to PT implementation.

Three of nine SEN teachers suggested increasing the number of SEN supervisors, asserting that “there is a lack of SEN supervisors as there is with SEN teachers” (S5ST7). They hoped that a greater number of supervisors would result in more visits and therefore more assistance with their roles (S6ST2). They also acknowledged that supervisors are currently unable to visit regularly because of work pressure, so there is “an urgent need to increase the number of SEN supervisors” (S4ST5). This was also confirmed

by more than half of the SEN supervisors who explained that they have too much work and are responsible for too many programmes (SS2).

4.4.1.3.1 The selection criteria employed for choosing students

Students are a crucially important human resource for PT. Therefore, the process of choosing students to take part in these programmes was found to be an essential first step in implementing this teaching method, having perhaps the largest effect on its outcomes. For this reason, SEN teachers were asked to reflect on the criteria that they used to select potential participants from their available pool of students. Their responses are discussed below in terms of the criteria related to peer tutors, criteria related to peer tutees, and common criteria.

4.4.1.3.1.1 Criteria for selecting peer tutors

When establishing a tutoring scheme, one of the most important elements is the selection of the best tutors from the student population. Teachers were therefore asked to report on the criteria they used for selecting student tutors. It became immediately apparent that the Arabic concept of *Adee* 'normal', in comparison with the Arabic word *Thawi alehtiajat altarbawiah alkhasa* 'special educational needs' or *Thawi soubat altaa'llum* 'specific learning difficulties', was an essential standard for being a tutor, as evidenced by the statement that, "PT is a learning style that allows students who have lower abilities than normal students to learn from them" (S1ST3). It is important to note that the concept of *Adee* emerged from the initial analysis in Arabic. However, it could not be translated directly into English because it would then refer to different meanings such as 'plain', 'usual' or 'ordinary', losing its original, intended meaning. Normality implies the existence of a norm, so anything that departs from it is abnormal. In this study, almost all teachers and supervisors seemed to use the concept of normality to differentiate

students, without intention to insult, in terms of the abilities of mainstream students and those with special needs, including students with SpLD. Nevertheless, using this word to address or categorise mainstream and SEN students would still constitute a form of discrimination, because it can foster assumptions about SEN students based on their impairments (Kearney, 2011). Indeed, many participants in this study used the Arabic concept of *Daf* ‘weakness’ to refer to students with SpLD whose performance was below average, in comparison with other ‘normal’ or mainstream students, as in the statement that “we select normal students to provide teaching support to our weak students” (S5ST7). Some mainstream students also used this terminology to refer to students with SpLD. While this concept was used in recognition of the effects of SpLD on academic achievements, it nevertheless seems to reflect a lack of understanding about the true meaning of SpLD, as these students would not have low achievement in all subjects. Identifying students based on their disabilities or weaknesses and neglecting their strengths can not only stigmatise them among other students, but also has the risk of ignoring their needs and abilities, and even minimising the learning opportunities provided to them (Wolter, 2017; Haegele and Hodge, 2016).

Teachers thought that mainstream students were the only students who can play the role of tutor effectively, because they tend to have a better command of the subject. “A student with SpLD might not be able to understand complex information, so she will not be able to deliver the information” (S4ST5), which is particularly important “with the difficult subjects such as mathematics” (S6ST1). Another reason was given by two of nine teachers, who confessed that, “it is difficult to find two students with SpLD who have different strengths and weaknesses” (S5ST7). This is important because this combination would allow students to help their friends within their zone of strength. However, even if they were found, scheduling issues would still be likely to make cooperation difficult (S5ST9).

Excellence was the second criterion for selection reported by all teachers. This concept means that students selected to participate in PT had to be excellent students and superior in their classrooms. One teacher commented:

As with choosing the peer tutor, I initially have to ask the teachers in the classroom [mainstream teachers] ‘who is the most excellent girl and who you feel that would accept the idea of being a tutor?’ and then they give me a list of names. I then go to my student [SpLD student] and ask her ‘what are the names of students in your classroom who you feel are collaborative and eager to learn? I want to choose one to help you?’ and then they give me a list of students (I already have the names of the students). I usually ask my student, ‘why did you choose these names?’ and she explains the reasons to me. I ask her because they [SpLD students] do not accept anyone, so while one girl [peer tutor] might be excellent, but she [SpLD student] might not harmonise with her (S1ST3).

Another teacher said that, “my own understanding of PT is it describes help provided by a superior student to a student with SpLD” (S6ST1). Teachers explained some characteristics of an excellent student: “she [peer tutor] has to deliver correct information to my girls [SpLD students] because if they receive information they will hold it” (S5ST9) (S1ST3), “she has to attend all classes and not be absent, her homework and activities should be completed” (S1ST4), and “skilled in the subject, distinctive... and are able to deliver the information” (S5ST7). More than half of the SEN supervisors held the same view, asserting that, “the leader in PT is the student who is... well-versed in the subject” (SS4).

However, almost all teachers agreed that simply being excellent was not sufficient criterion for the selection of students on its own, since personal characteristics and character were also vital. Teachers categorised personal

characteristics under ethics and collaboration, and asserted that students who were selected as peer tutors should be, “polite and need to have good manners” (S1ST4) and “they have to respect SpLD students’ feelings and not be arrogant” (S2ST6). Teachers believed that this was important because “SpLD students are very sensitive and they can be hurt easily” (S6ST1). Because of this, peer tutors “have to talk with SpLD students by using appropriate language, they have to listen to them while they are talking and give them enough time to think and answer, they have to feel the responsibility” (S5ST7). Additionally, five of nine teachers maintained that students who play the role of tutors, “have to love collaboration, they should have ambition and a desire to make something, to help their friends” (S2ST6), as well as being enthusiastic and “an active participator in their classrooms” (S3ST8). Another teacher agreed that, “to be collaborative... has the love of giving” (S4ST5) is crucial for prospective tutors.

4.4.1.3.1.2 Criteria for selecting peer tutees

Teachers were also asked to report on the criteria that they use for selecting which SpLD students would benefit from PT activities. Just under half of the teachers stated that they focused on the level of difficulty and the particular needs of the students with SpLD. Two of nine teachers selected students with moderate to severe difficulties because, “they like to receive the information from their colleagues more” (S2ST6), and because, “students who have a mild difficulty do not need a peer tutor because they can help themselves” (S6ST1). Two SEN teachers added the importance of ensuring that students involved in PT were not easily distracted, because “their tutors are talking and the classroom teacher is talking and other students are talking, all at the same time” (S4ST5). Two teachers explained that they chose students for PT when they lacked confidence and a social circle: “I select those who really need a

tutor, either because they do not have friends or they do not have self-confidence, who cannot ask, who have difficulties asking” (S1ST3) (S3ST8).

4.4.1.3.1.3 Common Criteria

While there were specific criteria related to peer tutors or peer tutees, all participants chosen by teachers tended to be of the same age, studying in the same class, and have a positive attitude. However, different perspectives were offered regarding whether previous relationships should be considered as part of the selection criteria.

Teachers agreed that PT worked best with two students of the same age, who were studying in the same classroom because “there will be an intellectual compatibility between students... and students will not be shy with their tutors” (S1ST3). Additionally, many teachers also claimed that students understood their peers more easily because they have “a common style” (S3ST8), meaning that they shared “the same thoughts, the same preferences and attitudes... they know what teaching styles their colleagues love better than the teacher” (S6ST2). When students were studying in the same classroom:

They will be together all the time... receiving the same lessons at the same time with the same teacher and having the same homework and exams... they can have more discussion and can gain more experiences because they are with their tutors all the time in the classroom, so they will gain skills (S6ST1).

With reference to assigning older tutors, who were studying in a grade above the tutee, teachers mentioned a number of difficulties:

We have not implemented PT in this way... students will have different subjects and schedules, so I am worried this will harm

the girl [peer tutor] if she comes while she has a class or even the SpLD student, if she has a class at the same time. It is a bit difficult. Also, the teachers here are happy... because all students [tutors and tutees] are studying in the same classroom, they are depending on Huda [peer tutor] to help SpLD students because I told them that Huda has become an assistant teacher (S6ST1).

Teachers also stressed the importance of selecting students who were positive towards PT, with many teachers adding that PT was more effective when the students were already friends. For example, one teacher asserted that:

This [peer tutee selection process] relies heavily on the personality of the student with a learning difficulty, especially her acceptance of the idea that one of her friends will be her tutor, and on my opinion of whether I feel that she would benefit from it. For instance, some of them love this idea and even prefer to work with their friends in their class if the lesson finishes early rather than coming to me [in the learning resources room], and some students have asked me if they can work elsewhere. I told them, “ok, I will allow Maha to help you in the classroom, but here is a worksheet to complete”. I do not doubt that they will work, but I want to see the results of Maha’s teaching, and I have actually seen good results, God bless them (S2ST6).

However, despite believing that it is essential to ensure that students accept the idea of PT, only one teacher of nine mentioned that she had implemented the programme with SpLD students who had not initially accepted the idea. She observed that students often came to accept tutoring after the implementation because of a realisation that “they need this kind of help” (S1ST3). Similarly, teachers asserted that participating in PT should be voluntary, in the sense that students who were selected as peer tutors had to show “ambition and willingness to support their friends” (S3ST8). Some

teachers argued that when students were forced to teach their friends, it was less beneficial for SpLD students and could even result in the pupils being bullied by their tutors.

When the mainstream students were asked about their attitudes towards PT, all tutors stated that they liked to help SpLD students. They attributed this to a desire to help others succeed in their studies. Some tutors even mentioned that they had also benefitted from their participation: “I teach her and at the same time I review the information for myself” (S1MS26) and “I love to teach her because this can help me to retain the information more” (S4MS20). When I investigated whether students thought that being a tutor was too time consuming, the mainstream students denied this and explained that they only provided support in their free time. Similarly, almost all SpLD students had a positive attitude toward PT. They asserted that they wanted to continue with their peer tutors in the following year, because their tutors are “kind” (S3Ss36) (S3Ss35) and because they helped them to understand and complete their homework. Two of eighteen SpLD students stated that they did not like receiving support, instead wishing to develop their own independence and self-reliance (S6Ss1) (S1Ss25). These answers suggested a measure of misunderstanding or a lack of differentiation between independence and receiving support from others.

All participants were also asked whether the existence of a previous relationship between students would constitute a barrier or a facilitator for PT and whether it should be considered in the selection of students. A range of different perspectives was obtained on this matter. Four of nine teachers stated a belief that selecting students who had previous relationships could enable more effective PT and should therefore be considered as a criterion for selection, because it can create “harmony” (S5ST7), “familiarity” (S2ST6) and “compatibility between the characters” (S6ST2). The same number of

teachers held a neutral view, although this led them to suggest that other more important factors should be considered during selection, such as satisfaction and acceptance. For example, one teacher explained that she placed more importance on her “student’s feelings and who she likes and feels comfortable with and accepts working with” (S4ST5). Finally, one teacher argued that selecting students based on their previous relationships might make PT less effective, because they would be more likely to become distracted and waste time talking (S1ST3).

The same views were held by SEN supervisors and students, who considered that previous relationships should not be an important factor in selection. Half of the mainstream students (nine of eighteen) saw no difference in helping students who were known or unknown to them, because they would get to know each other during the course of the programme. Instead, they argued that selection should be based on the willingness of the SpLD students to cooperate. As with one of the teachers above (S1ST3), five of eighteen mainstream students argued that teaching students with whom they have a relationship can hinder PT: “we will talk and play, and studying will be delayed” (S1MS26) and “I will not feel comfortable... she will not focus with me” (S6MS2). Those who felt that previous relationships would be beneficial stressed the ability to understand one another and maintain a comfortable relationship. “It will help me to know what my friend likes and how I should deal with her” (S3MS33) (S5MS23) (S1MS27). The majority of SpLD students (fourteen of eighteen) expressed a preference to be taught by a friend, because it would strengthen their relationship, make them more comfortable and facilitate understanding. It was interesting to note that no SpLD students thought that previous relationships would hinder the implementation of PT. Even those who held a neutral view reported that the most important consideration was the ability of the tutors to explain themselves and make ideas comprehensible.

All SEN teachers reported that mainstream teachers should play an important role in the selection process, particularly in terms of identifying the most capable students. “They spend more time with students in the classrooms and they have more contact with them” (S5ST7). SEN teachers also give credence to the opinions of SpLD students during the selection process and often consulted them before assigning any peer tutors. This approach was informed by the belief of teachers that an effective PT programme is highly dependent on SpLD students feeling comfortable and satisfied with their tutors (S1ST3).

In summary, this section outlined the most significant barriers (e.g. class size, lack of time, or poor physical and human resources) that were identified regarding the resources required for PT. SEN teachers also recognised the need for more technological support, better provision of educational aids and more financial support. The intensity of lessons and scheduling issues created time pressures, making some participants to recommend more SEN teachers and supervisors should be hired, including TAs. Finally, this section examined the different selection criteria for choosing students, accepting normality, positive attitudes, excellence and other personal characteristics, as well as the difficulty of the subject and the needs of students with SpLD as key criteria.

4.5 Division of Labour

The fifth dimension identified in the data is the division of labour. This factor pertains to the various roles and responsibilities of all of the participants in PT programmes: SEN teachers, mainstream students and SpLD students. This section presents the roles played by these subjects, in an attempt to obtain a comprehensive understanding of the implementation of PT programmes for students with SpLD in Saudi Arabian schools.

4.5.1 Peer tutors' roles

The data collected in this study were obtained from observations in both mainstream classrooms and learning resource rooms, supplemented with interviews. The findings revealed that more than half of the peer tutors performed the role of a teacher, serving as a transmitter of knowledge. This model was cited in many of the examples provided by mainstream students, such as:

PT is between SpLD students and high-level students who are responsible for helping SpLD students to understand the lessons or the points that they do not understand... During free time, we meet and find the lesson that SpLD student did not understand in the book, then I start to explain it to her. Sometimes I bring the worksheet with me, to help me explain how to answer the questions... I helped her in writing in English, we met here [in the learning resources room] and she gave me Arabic sentences and I translated them for her (S1MS26).

I explain the lessons and help her to understand and answer the questions alone... If she does not know how to answer a question in mathematics, I ask her to read the question then I start to answer the question... and then I teach her the way of answering the question (S4MS20).

The majority of the mainstream students also stated that the main purpose of PT is to provide explanations and direct instructions: "PT is for explaining the lessons, helping the SpLD student understand, teaching her how to answer questions and then letting her answer alone" (S3MS33).

This teaching style and pedagogy was confirmed by nine of eighteen SpLD students, when they were asked to describe the assistance provided by their

tutors. Statements made by SpLD students were, “when she teaches me, she explains and I listen to her. She writes a question and I write with her, she answers the question and explains how she answered it and then I copy the answer” (S2Ss6), “she helps me in the difficult things, she teaches me what is wrong and what is right” (S6Ss3), and “she explains to me, she opens the book to explain what I do not understand and I listen to her” (S6Ss1). Mainstream students seemed to rely on this way of teaching as a result of the influence of their classroom teachers, whose style they imitated. One mainstream student reported that, “in my teaching I tried to teach in the same way as the teacher. I do not go away from her way of teaching. I do not teach in a different way. I am following the same steps” (S2MS9). Given the need to manage large numbers of students in physically restricted classrooms, teachers in Saudi schools often utilised strategies that reflected a more teacher-centred approach. This approach was influenced by the norms dominant in Saudi society, which emphasise that the transmission of knowledge through repetition and memorisation is integral to the process of learning how to be a good Muslim, due to the importance of remembering and repeating prayers and sections from the Qur’an.

However, observations revealed that most of the mainstream students focused on simplifying the information conveyed to their tutees through the use of straightforward explanations and examples. For instance, one student tried to explain the meaning of genetics in science by saying, “it is like the transmission of qualities from your family to you” (S2MS11). This supported their perceptions of their role, namely that they are supposed to “deliver information in a way that is easier than the way used by teachers” (S5MS23) and the style of their teaching should not be “100% like the teachers’ because it is important to facilitate the meanings and provide examples” (S2MS11). Almost all SpLD students shared this view, explaining that their tutors helped them to understand information better than their classroom teachers were able

to do, because they “give many examples and simplify teachers’ explanations” (S2Ss10). SEN teachers also confirmed that mainstream students frequently modified their classroom-based language to facilitate the comprehension of SpLD pupils. One SEN teacher reported that:

It seems that they have a common style, they deliver the information easily to my students while the teacher needs to explain and to repeat many times. Students deliver the information in a simple style and my students understand and answer (S3ST8).

Two SEN teachers from two different schools also reported that some mainstream students had taken to using the concept map technique in order to help SpLD students to understand a concept. While this was not noticed during observations, two mainstream students and one SpLD student mentioned this technique and claimed that it had helped them to understand and memorise their lessons. Additionally, observations revealed that almost all mainstream students gave their tutees practice opportunities (see

Figure 4.9), checked their understanding of students, and offered positive reinforcement. SpLD students were given at least one opportunity to practice what they had learned during the vast majority of the PT sessions.

Figure 4.9 Sample of worksheets designed by peer tutors

المصالح

مكي. طالبة هيتهره مودة : فاطمة
عجا. اجتعت عن النجاح مودة : مكي
أجبت عن سمار مكافآت مودة : مكي

الجملة	الضمية المتصلة	الضمية المنفصلة	الضمية المستتر
لا تنظر الحياه ينطق صوتها	X	X	لا تنظر (أنت)
لا تتعلك أناك لست نابغة	X	أناك الناغي المتعلك	لا تتعلك [أنت]

ا ل ك ل
 ا
 الف
 ا ل ك ل
 ا ل ك ل

الحل	حرف الج	الاسم	نوع	علامته
احذر من صيف اسوي	ص	المجدد الصادق	مفرد	الاعرابية الكسرة
لا يبييضك	ل	يبييضك	مفرد	كسرة

أضع الاطلاق
الحادة بعيداً
عن الاطفال

اذكرى - مرقى البر: من - لك - عن - فحي -

However, most of these practice opportunities were only aiming at examining students' remembering of the content delivered by the tutors rather than offering opportunities for discovering, analysing or even criticizing a piece of information. As an example of this, when mainstream students explained how to write and draw on the smart board, they then provided an opportunity for

the SpLD student to practice what she had learned (S4MS16). Another mainstream student was teaching a mathematical lesson to a SpLD student, after which she asked her to answer some questions by following the same steps that her tutor had just used. During this process, the mainstream student was very patient, giving her tutee ample time to answer without interruption. Most of the mainstream students were also very concerned about checking the understanding of their tutees, by asking them directly, “did you understand?” This statement was repeated several times during all the PT sessions that I attended. It was also recorded in multiple interview transcripts, such as “I give her questions to answer or ask her to explain what she learned to check if she has understood or not” (S4MS24), “I encourage her to tell me whether she understands or not, I ask her ‘do you understand?’ and if she did not understand I explain again” (S2MS11). Two SEN teachers added that tutors in their schools designed exams for SpLD students to check their understanding before “periodic exams” (S1ST3) (S6ST2). In addition, positive reinforcement was provided during more than half of PT sessions, with tutors rewarding their partners with verbal praise, like “excellent” and “you are right, you did well”, by telling their teachers that their tutee had answered the question alone, or through praise, such as patting their friend’s shoulder.

In addition to teaching, participants mentioned other roles performed by peer tutors, although these were not seen during the observations. The first of these was helping SpLD students to complete their homework and projects. One SEN teacher reported that:

One of the mainstream students came to me yesterday and told me that she found that her friend [SpLD student] did not answer one of the questions in the homework because she did not know how to answer it, so the mainstream student helped her in the morning

before the school queue by explaining how to answer the question (S6ST2).

However, two SpLD students stated that their friends helped them with their homework by allowing them to copy the answers directly from their notebooks (S2Ss6) (S5Ss18). The students justified this by saying that they did not want their friends to be punished by the teacher, but that “there is no time for explanation” (S6MS5) (S4MS15). Another role that was not seen during the observations was helping SpLD students to memorise information, especially poetry and Qur’an verses. This was mentioned by half of the SEN teachers, five mainstream students and seven SpLD students. However, assistance was restricted to the division of information (S5Ss18), listening while they were reciting (S4Ss14) and correcting their mistakes (S2ST6). The tutors did not teach their study partners any learning techniques to foster independence, such as mnemonic devices, recording their voices, or flash cards. The third role performed by students was helping their tutees to acquire the information that they might have missed during an absence, or reminding them of exams and homework. This role was cited in the interviews by just under half of all participants, including SEN teachers and students (tutors and tutees).

4.5.2 Peer tutees’ roles

In traditional teaching strategies, tutors direct the learning and SpLD students occupy a more passive role, in which they principally listen to their tutors and follow instructions. For example, during one PT session, the tutor wrote some words on the board, asked the SpLD student to write them in her notebook, and then to read them aloud. In another PT session, the tutor explained the steps of a mathematical question, which the tutee copied onto a small board. This passive role was confirmed by the SpLD students, when

they described their roles in interviews. “She teaches me the lessons and explains what I do not understand and I focus with her and try to understand, and copy what she writes on the board” (S2Ss6) and “I listen to her reading and then she asks me to read like her. I read and she corrects my reading” (S3Ss35).

Despite adherence to the passive learning format, observations revealed that active listening was taking place during PT sessions. SpLD students were paying full attention to their tutors, maintaining eye contact and responding to them as required. Furthermore, their willingness to understand was also evident from the questions that they asked their tutors. More than half of SpLD students interrupted their tutors to check their understanding or obtain clarification. Just under half of mainstream students stated that the role of tutees in this relationship was to ask for help and raise questions where required. “I helped Noof [her tutee] once she asked for help” (S2MS9), “sometimes she asks me if she faces difficulties in answering a question which I gave her [...] She also asks for my books to complete the answers which she missed in her books” (S4MS20). This view was shared by the majority of SpLD students, who stated that they would request repetition or clarification from tutors, if required, because they “do not feel shy to ask any questions” (S2Ss12). Nonetheless, five SpLD students do not ask questions because they “feel shy” and do not want to make their tutors “tired” (S4Ss14). This was also mentioned by two mainstream students who said, “they [her tutees] are silent, I do not know if they understand or not but I asked them and they said ‘we understood’” (S1MS29) (S4MS16).

All SpLD students also demonstrated active participation in answering the questions set by their tutors, as well as spending sufficient time thinking and completing tasks. However, it should be noted that all of these tasks required lower order thinking skills: knowledge, comprehension and application.

Tasks therefore tended to be recitation, deduction and using rules to answer questions.

4.5.3 SEN teachers' roles

This section provides data on SEN teachers' roles, in terms of the extent to which they affected the implementation of PT in this study.

4.5.3.1 Training

There was a broad consensus among the majority of SEN teachers on the importance of training students before the implementation of a PT programme. However, the results showed that the training provided for students was insufficient. This attitude to training seems to be due to a lack of common understanding of the criteria and aims of the preparation of students to participate in PT. Three different views of training were explored in this study. The first pertains to establishing relationships and creating familiarity among students, which is important because it helps students to get used to each other, to feel comfortable working with each other. This can be seen in the following anecdotes from SEN teachers:

I arrange for an initial meeting with the two students. I try to create a calm environment to help the students to be familiar with each other. For example, I told Abeer [SpLD student] that Dalal [mainstream student] is your friend in the classroom, so let her help you, let her be your consultant... consult her in the lessons and homework that you need help with... and if you do not find her come to me, so consider her like me. Then I try to reward Dalal and encourage her by saying you are a teacher, this is your preparation book and I will review and sign it for you regularly. From this point they start to be together (S6ST1).

I establish familiarity between students by gathering them here in this room [learning resource room] and asking them to read a story and discuss its main ideas. I ask them to discuss the story, what it is about, its characters and the end... Sometimes I encourage them to work collaboratively in answering a worksheet, which helps them to become closer... I gather them and tell the SpLD student that this is your teacher: she is going to help you and provide you with some services, ask her about anything you do not understand. She is your teacher who will guide you if you do something that is not good in the classroom, she will say to you 'no this is wrong'. Ask her about anything that confuses you. She will explain anything you did not understand (S6ST2).

The second relates to the provision of basic advice and instructions about how to teach SpLD students, such as, "I told the peer tutors not to ask Sara to write quickly, do not say this, be patient, help her slowly, slowly and always ask her 'do you want anything?'" (S3ST8). These instructions tended to encourage simple instruction giving and the place of the tutor within the educational environment, in addition to developmental advice like "do not explain anything because we do not want her to get used to being dependent" (S6ST2).

The third form of training commonly provided by SEN teachers was an explanation of the general meaning and the purpose of PT. This sometimes involved presentations and videos about PT, which were shown to both students, after which, some teachers modelled the correct approach for tutors:

The training lasts for three to four weeks... I then start to teach the SpLD student and the tutor watches me, then I ask her to teach and see how she teaches, sometimes they teach better than me. At the

beginning they take it as playing, they have fun, then it becomes serious (S2ST6).

However, three SEN teachers stated that they did not provide any training for peer tutors, considering it unnecessary, because the students had already been trained by their instinct and classroom experience. One said, “I do not need to train the students because this strategy is sometimes used by mainstream teachers... especially with the new curriculums which have discussion exercises” (S5ST7) (S1ST4). Another teacher argued that the excellence of the students chosen to participate in tutoring meant that training was unnecessary: “they do not need to be trained because I deliberately select a student who is able to deliver the information” (S5ST9).

Students (tutors and tutees) were also interviewed regarding their perspectives on training for PT. The results indicated that all students believed that appropriate training would facilitate its implementation. When asked to outline the training they had received from their teachers, all peer tutors asserted that they had not received any training. However, just under half of the students deemed themselves to be fully or partially trained to fulfil their role. They attributed this training to familiarisation, experience and basic advice from teachers, rather than explicit training. Similarly, the majority of SpLD students asserted that had not received training, but that they felt prepared by being informed about the purpose of PT. Only three SpLD students wanted to be trained. “I need someone to train me... I know some of my roles in PT but I feel shy asking for help” (S1Ss25). This limited understanding of training is an obvious result of the lack of understanding among SEN teachers on what training should involve.

This lack of understanding of the criteria for training students indicated insufficient preparation of SEN teachers to implement PT programmes, which was highlighted as the main barrier to PT. All SEN teachers asserted that PT

was guided by their personal knowledge, obtained from reading, researching, consulting colleagues, and their own experiences (S4ST5). SEN teachers stated that they had learned about PT and other teaching strategies during a single day of training (S6ST1). The SEN teachers thought this was insufficient, although the experience varied considerably between participants. One SEN teacher levelled strong criticism against her teaching training course:

They presented videos of some implementations of PT in our training course, but they were all foreign. I always say to them that regrettably you give us foreign studies, give us studies from here: our reality is different, our learning environment is different, our numbers are different, our cultural environment is different, and our societies are different. How can you bring foreign studies and tell us to do the same thing in our classrooms?! (S2ST6).

This was supported by another SEN teacher, who commented that “I suggest having national studies like yours... If we have a study like yours, after you have researched and found the barriers you might then look for solutions which can be implemented here, this is really excellent” (SS1ST3).

All SEN teachers expressed a desire for more training courses in special needs, with a particular emphasis on PT. They expressed the belief that this training would furnish them with effective strategies and ultimately “reduce the work pressure” (S4ST5). Teachers also recognised the importance of specialised training to enable them to prepare students more effectively:

Even if we design a small workshop for five or six students to help them learn more teaching strategies, it is not important to be versed in the subject but to know when to use a strategy, to learn how to give sufficient time, to be able to follow and supervise, not just give the lesson (S5ST7).

However, the majority of SEN supervisors held the opposite view, arguing that “SEN teachers are fully trained” (SS4) and that they should therefore not “wait until their supervisors come to teach them how to implement the method in detail” (SS1), because “they have reached the age that makes them able to solve any problem they face” (SS4).

Moreover, one SEN supervisor stated that any failure in the implementation of PT should not be attributed to a lack of training. Instead, it should be understood as a failure of the teachers themselves, because there are numerous courses available on teaching methods: “there are many teachers who do not implement PT, not because of the lack of training, but because they are not willing to renew and develop their way of teaching” (SS2). However, she proposed the organisation of “a team for measuring the impact of any training course to establish its outcomes. This will encourage teachers to implement what they have learned” (SS2). These views on training showed a profound mismatch between supervisors and teachers. The former considered that current training provisions were adequate and appropriate, with teachers needing to take responsibility for their own development; the latter felt unprepared due to a lack of training and that they need more training courses to be made available.

4.5.3.2 Planning and supervision

Planning and supervision are essential aspects of the implementation of PT programmes. Four of nine teachers stated that planning was a barrier to PT. They attributed this to recurring scheduling problems:

SEN teachers already face difficulties in our classes bringing the students here [learning resource room] especially with the middle school stage, which is different from primary... if the student finishes reciting she is allowed to come here. This makes it

difficult for me to plan for a PT session to take place, for example, in the third class. It is difficult to prepare the activities and to ensure that everything will go as planned (S5ST7).

In addition, the majority of teachers argued that planning complicated the PT process, thereby restricting teacher activity and stifling the creativity of student tutors:

I do not plan for PT, I just tell the tutor 'see how I teach my student and teach her as you want using the method you like', so the idea of PT was wonderful because it started with simplicity (S6ST2).

I do not do any planning for PT because I like to see what I can get from the students. They can create for you, they are amazing and smart, they give you ideas and they can even overtake you (S3ST8).

In contrast, the same number of SEN teachers (four) stressed the importance of planning in the effective implementation of PT. However, despite this position, there was no evidence that any planning procedures had been utilised in the PT programmes that they ran. There was no evidence of lesson plans, training aims or tutoring schedules. The exception was one teacher who had two papers that she referred to as her planning for PT. These papers included four main sections as follows:

- 1- A definition of PT
- 2- The general aims of PT (not related to a particular tutoring session)
- 3- An explanation of how to implement PT (in the form of six steps, beginning with introducing PT to students and ending with evaluation, although no procedural details were provided for any step)
- 4- The general features of PT (not related to a particular tutoring session)

Two SEN teachers also demonstrated limited understanding of planning, as they primarily perceived its application in relation to the criteria for the selection of students to participate on courses (S4ST5). Finally, one SEN teacher expressed a neutral position, asserting that, “I do not plan for PT. I heard that there is some preparation required for implementing PT but I did not feel its impact because I did not do it” (S6ST1). As with training, there seemed to be a lack of understanding regarding the intricacies of planning for PT.

Most SEN teachers agreed that continuous supervision is important for successful PT programmes. Despite this position, the data showed few official meetings were scheduled with students. SEN teachers stated that they relied on ‘a follow-up file’ to monitor the progress of PT. Peer tutors were responsible for this file, which they used to record their lessons, store worksheets, and include comments about the progress of SpLD students. Tutors could decide to keep the file or to leave it with the SEN teachers (S6ST2), who used it to learn “what they studied, what she did, what activities she used and why they chose these topics or why they focused on this subject” (S1ST3). There was evidence to suggest that teachers used this file to demonstrate the implementation and content of PT programmes, rather than for supervision, evaluation or feedback:

There is a file I asked the tutor to prepare and keep with her, to write the date, the subject in which she helped her friend, for example, science and the topic, or reciting the Qur’an from verse number this to verse number this. Then, my role is to ask my student did you recite to Huda and then she will say ‘yes, I have recited this and read this and she taught me this topic’ (S6ST1).

This may be associated with the expectations of supervisors, who used the files to assess the progress of PT programmes. One supervisor stated that:

All tutors have a file... there are exercises, summaries, exams. It is important for me as a supervisor, and for the teacher as well, to know whether students have implemented PT or not, so if they record everything we will be able to supervise them (SS3).

Despite the lack of official scheduled meetings with students to determine the progress of the course, just under half of the SEN teachers stated that they occasionally spoke with SpLD students to ask for their opinions of their tutors, which they do when the tutor is not present. These assessments seemed to focus on the character of the tutor more than the content or efficacy of the programmes, however: “I asked my student what do you think about Lama ...They told me she is collaborative, kind and helped them a lot” (S6ST2).

Some of the SEN teachers stated that they also met tutees in certain situations, such as when the tutors were unable to help them, or when they want the tutor to be given specific guidance on a given topic (S6ST2). This seemed to have resulted in a level of supervision on some courses, such as:

If my student told me that her colleague did not help her or if I feel that the peer tutor does not give much or her participation is reduced, I will call her and meet to ask her why she did not help or what is her excuse. She may say, for example, I was in a hurry, so I will try to alert her (S6ST1).

However, two SEN teachers claimed to supervise PT activities with more reference to the tutors than tutees, in order to learn what they have been teaching (S1ST3) and to encourage continuous implementation of the programme:

I bring the tutors here [learning resource room] and ask them ‘will you teach them today, where will you teach them, when you will teach them? Come here to teach them, it has been a long time since

you taught them in this room, so you need to enthuse them’ (S3ST8).

All teachers stated that an essential part of their supervisory role was the assessment and reward of peer tutors, which they felt was important to ensure continued implementation of the programme. “The work will not be done without rewards” (S4ST5). When viewed collectively, teachers relied on a wide range of gifts and incentives, such as compliments, gifts and even academic support: “I have to stimulate the peer tutor by calling her ‘small teacher’, I always thank her and say you are an excellent student” (S6ST1), “we gave them a happiness box which included candies. We also gave them golden necklaces” (S1ST4) and “I told the tutors I will give you grades. If you lose some grades in exams come to me and I will add them to you, you deserve grades for your work” (S6ST2).

With only one exception, none of the SEN teachers supervised the PT sessions taking place in mainstream classrooms. This meant that supervision of PT by SEN teachers only occurred when sessions were held in the learning resource rooms. Observations in the learning resource room revealed that SEN teachers in this context took an active role, interrupting peer tutors to advise the tutors, such as recommending the quantity of information be reduced and encouraging them to provide more exercises. Teachers also monitored the students, reminded the tutor about the remaining time available for the lessons, and checked the understanding of the tutees by asking direct questions, such as ‘did you understand?’ or ‘do you need her to explain again?’

Most tutors and tutees stressed the importance of being supervised by teachers and provided a number of benefits that they felt that this would provide. These included: “I prefer to have someone to observe me, if there is no one I will not care that much” (S1MS27), “if I say something wrong she will guide me”

(S2MS13) (S2MS11) and “teachers will make sure that she understood because I might not make her understand” (S4MS20). SpLD students also placed a great deal of importance on the presence and guidance of SEN teachers: “my teacher helped me and guided me, she said do not do this, this is not good for your future, when she asked me about what I did with my friend I felt the responsibility, I felt that I should work hard” (S1Ss30). Despite these comments, more than half of all students said that they did not receive supervision. In other cases, supervision was typically restricted to their teacher asking about the content of the tutoring sessions and their opinions about the tutee, without the provision of feedback or the evaluation of their performance.

Two mainstream students perceived supervision as being a barrier to PT, because of the feeling that they were being observed. The notion of censorship was also raised by two SEN teachers, who said that, “supervision is important if there is something wrong which needs to be changed, but do not ask students about everything they do” (S6ST2) and added, “I do not like to follow them precisely, I look at what they are doing but do not make them feel that I am observing them, I prefer them to have self-censorship” (S4ST5).

This section has demonstrated that competence, experience and beliefs affected the way that different individuals fulfilled their roles. In order to fulfil the objectives of PT activities, participants needed to question, discuss and establish the concepts and objects. The model of the teacher as transmitter of knowledge was evident in the approach of peer tutors during the observations, as reflected in the emphasis on delivering and explaining information. As a consequence, the roles of SpLD students were limited to listening, practicing and answering questions. Peer tutors were also responsible for checking understanding, providing feedback, helping SpLD to memorise information and assisting with homework. The results also indicated that SEN teachers generally focused on training students, and

planning and supervising PT activities. This approach may have been influenced by the lack of training provided for SEN teachers and the effect that this had on attitudes, aims, and strategies used in PT. These issues are likely to have been highly influenced by the relationship between participants and the educational community, which is examined in detail below.

4.6 Community

The next dimension to emerge from the analysis is community, which refers to the network of all individuals involved in the implementation of PT. This section presents the findings under three main headings, starting with the role played by the school administration, primarily represented by headteachers. This is followed by a detailed examination of the relationships between SEN teachers and other school staff, such as mainstream teachers and school counsellors. The section concludes by examining the support provided by SEN supervisors.

4.6.1 School administration support

The main roles of headteachers are to follow instructions and ensure the adoption of the education policies that are prepared by the MoE. They can also influence the successful implementation of PT programmes through their role in establishing the school ethos and culture. For instance, SEN teacher in School 5 asserted that the headteacher supported PT practices by establishing an ethos of caring, stating:

My headteacher is very supportive and collaborative. She really facilitates the implementation of PT. God rewarded her well. She cares and allows both mainstream and SEN teachers to achieve their aims. For example, when she enters the classroom and sees

that the teacher is implementing PT, she [the headteacher] does not say ‘why you are no longer explaining and teaching students yourself?’ She is collaborative and provides the teachers with a supportive atmosphere to implement PT (S4ST5).

This headteacher encouraged the adoption of PT by mainstream teachers in that school, who were positive regarding the method and who had therefore started integrating collaborative learning into their own lessons (S4ST5).

However, SEN teachers working in two different schools expressed disappointment and anger regarding their treatment by their school administration. The first SEN teacher said that she had not been welcomed to her school or given a space to work. This reflected a perception on the part of the headteacher that the learning resource room was not “part of the school, she had not done anything about the room for one year and did not bother to ask for a new SEN teacher during that time” (S5ST9). This neglect was noted by one SEN supervisor, who stated that “we really face problems with school leaders. One of the problems we face is that in some schools is the school administration does not notify SEN teachers about any changes in the school schedule” (S4ST5). The second SEN teacher reported a more severe situation, with the administration playing “no role in my implementation of PT. The headteacher is new and does not know what SpLD means... she [headteacher] replied ‘you annoy me, you come to me every day, you and your teachers annoy me’” (S3ST8).

SEN supervisors recommended that the school administration should play an active role in supporting SEN provision, resolving conflicts among teachers to facilitate provision for SpLD students and “provide peace of mind for the SEN teacher” (SS3) (SS4). Another SEN supervisor emphasised that the school administration must play a role in encouraging the implementation of

PT, through an approach that “disseminates, broaches and makes PT official and compulsory” (SS5).

More than half of the SEN teachers and four of eighteen mainstream students believed that their school administrations had facilitated tutoring simply by virtue of giving permission for the programme to run (S6ST1) (S1ST3). One SEN also added that the administration have no “problems with anything that is for the benefit of the student” (S2ST6), although the headteacher “does not provide me with any teaching aids” (S2ST6). Although PT required explicit school permission, this was a minor contribution, given the power and responsibility of headteachers. This reflected lack of understanding about the support that should be provided by school administration.

Only two SEN teachers reported receipt of additional assistance, such as financial support (S1ST4) and facilitating rewards, or collaborating to modify school policies. “She [headteacher] helped me by writing a mainstream condition that requires all mainstream teachers to give peer tutors 10 grades as a result of their participation in PT” (S6ST2).

However, the same teachers added that they still needed more support, especially financially, to “reinforce students” (S1ST4) and provide facilities for students (S6ST2). Therefore, teachers suggested the importance of raising awareness among headteachers regarding PT, because awareness “of the meaning of PT and that it is a strategy, as any other strategy, we will feel more confident implementing this method widely” (S5ST7).

4.6.2 Collaboration between school staff

When SEN teachers were asked to reflect on their collaboration with school staff, they focused exclusively on their relationships with mainstream teachers and school counsellors.

4.6.2.1 SEN and mainstream teachers

More than half of the SEN teachers highlighted collaboration with mainstream teachers as a significant barrier to the implementation of PT. The six main reasons for this obstruction are discussed below.

Obstruction by mainstream teachers

One of the most significant problems cited by the SEN teachers was the refusal of their mainstream counterparts to implement or supervise PT in their classrooms, which was attributed to multiple factors, summarised by one SEN teacher as follows: “some mainstream teachers do not believe in the importance of PT, some have not tried to implement this strategy so they are reticent and claim that PT might waste time” (S4ST5). Because of the local conditions, with many teaching commitments, large numbers of students, and small teaching spaces, many mainstream teachers stated that they were forced to “rely on direct instructions and to silence everyone” (S4ST5).

Furthermore, many of the students stated that their classroom teachers did not know about their participation in PT. However, six of thirty-six students said that their teachers actively hindered their involvement, because they do not want the performance of the stronger student to suffer (S6MS2). One SpLD student explained that, “they do not want me to be with Suha because my level is low and her level is excellent, so they do not want her level to go down” (S6Ss3).

Poor mainstream classroom management

The implementation of PT also seemed to be adversely affected by the classroom management practices of some mainstream teachers. One SEN teacher noted that some of the other teachers failed to manage noise and

disruption, resulting in “two students are working together and the rest are laughing and chatting” (S4ST5).

Limited support with rewards

A lack of collaboration was observed in facilitating student rewards:

Some of them, not all, I do not want to make generalisations, but some of them did not agree to give the tutors grades in their projects as a result of their participation in PT. I remember one of the teachers who did not accept this was afraid of her supervisor. I told her that I will be responsible for this but then she changed her mind after she saw the results of this strategy (S1ST3).

Lack of collaboration

SEN teachers also complained about the lack of collaboration in scheduling (S5ST9), such as refusing to let students visit the learning resource room. In particular, the SEN teachers felt obliged to work around all other schedules, saying:

We go everywhere to find the students at any time or in any free classes... When the teacher left the classroom we took advantage of the remaining ten minutes to help our students... sometimes she [mainstream teacher] refused and said this week I need the student to attend the two classes, she sometimes just allowed me to take my student [SpLD student] (S1ST4).

This meant that many SEN students claimed to benefit from the high level of absenteeism among mainstream teachers, which enabled them to take students to the learning resource room. This raised serious concerns about the status of SEN teachers.

The lack of collaboration by mainstream and SEN teachers was noted by half of the SEN supervisors, who conceded that the resultant scheduling difficulties posed serious challenges for the functioning of PT programmes. One SEN supervisor explained the reason for the decision by mainstream teachers to refuse permission for students to visit the learning resource room:

Mainstream teachers are required to explain what the students missed during their lessons... they refuse to allow students to go to the learning resource room during their lessons, they do not want to provide extra teaching to the students (SS5).

Negative Attitudes

The fifth issue in this aspect of the teaching community was the negative attitude of mainstream teachers and their limited understanding of the role played by SEN teachers (S5ST9). In some circumstances, the mainstream teachers proved resistant to learning about SEN or accommodating SEN teachers:

They [mainstream teachers] do not want to allow the students to come here [learning resource room], they do not want to design special exams for SpLD students [...]. I made three awareness days, not one or two, I made three, but the teachers told me, 'we were not convinced with the previous SpLD teacher', I told them 'this has nothing to do with me, I am different, I came to you with different methods and different styles, I have nothing to do with the previous teacher' [...]. I cannot attend the classes; they refuse to let me attend the classrooms during their lessons (S3ST8).

Two of six SEN supervisors also highlighted the rejection faced by SEN teachers, especially regarding their attendance in mainstream classrooms, as a part of their role in the co-teaching. One noted that, "many of the mainstream teachers do not allow SEN teachers to enter the mainstream

classrooms because... they think that they want to assess their teaching” (SS1). Another argued that “SEN teachers need time to prove their presence, to prove that they can make a difference. They need time to gain mainstream teachers’ trust” (SS6).

Stigma about Disabilities

The last and perhaps most serious of the factors affecting the relationship between staff was the social stigma regarding disabilities: “they say that all students who enter this room [learning resource room] are stupid. This also impacts upon students, they feel too shy to come to me” (S3ST8) (S5ST7). It should be noted that Islam is intrinsically bound into the ethos of all institutions in Saudi Arabia and informs all daily actions and routines. Ultimately, therefore, education should help individuals to become better Muslims. Islam encourages respect and equality, as well as the pursuit of a better understanding of Allah. Allah urges Muslims to help disabled people. Therefore, the main source of the social stigma regarding disabilities seems to be the collective culture in Saudi Arabia, rather than the teachings of Islam.

The SEN teachers who reported difficulties with mainstream teachers noted that problems only occurred with those teachers who did not recognise the importance of the SpLD programme or who do not value PT. Furthermore, three SEN teachers stated that mainstream teachers in their schools were collaborative (S6ST1), helping by “nominating some students to play the role of tutors” (S6ST1), facilitating rewards by agreeing “to give grades to peer tutors” (S6ST2), and providing “information about the progress of PT” (S2ST6). Two of these teachers worked in the same school. Both teachers stressed the importance of fostering positive relations and argued that successful communication relies on SEN teachers gaining the affection of mainstream teachers. They said that, “collaboration between staff is very important. You know, I eat my breakfast with them... My presence with them

encourages them to ask me about the meaning of SpLD” (S6ST1). Her colleague added:

I always contact with the mainstream teachers... sit with mainstream teachers, laugh with them, chat with them, build familiarity between you and them, drink your coffee with them, eat breakfast with them all together... All this is for the benefit of the students because they will then be too shy to say no to you, they will then facilitate your work (S6ST2).

4.6.2.2 SEN teachers and school counsellors

Most SEN teachers held a neutral view about the role of their school counsellor. The majority stated that the counsellors did not play any noticeable role in the implementation of PT, although they conceded that they “can help me in general with other issues related to my students” (S5ST7). This view was supported by all except one SEN supervisor, who believed that the school counsellor should play an important role in nominating students for PT programmes (SS4). One SEN teacher supported this view, stating that the counsellor in her school helped her with work and “nominates the students who can participate in PT activities” (S5ST9).

Only one SEN teacher cited a poor relationship with her school counsellor, arguing that the increased workload from the counsellor actively hindered her implementation of PT:

She is a major obstacle... Let me be honest with you, school counsellors are considered to be a member of the team work but I swear that each time I have asked her about something she replied ‘I do not know, delay it for later’. Each time I asked her about the student and the problem she faced she said ‘I do not know’... I refer the students if they have a speech problem, but I do the

referrals! And then I sign it from the school administration... these are her tasks! My task should be to refer a student to her [the school counsellor]... I feel that the students are affected by the delay. Even when I ask the teachers ‘do you see that she [the school counsellor] is doing her job? They said no’... unfortunately, we SEN teachers are suffering from these teamwork problems (S6ST2).

These results indicate a lack of understanding among most of the SEN teachers and supervisors regarding the potential benefits of collaborating with the school counsellor in the process of facilitating PT.

4.6.3 Collaboration between teachers and supervisors

SEN supervisors can play an important role in supporting and enabling the work of SEN teachers by clarifying related policies, particularly helping them to translate new pedagogical approaches into practice. However, almost half of the SEN teachers stated that their collaboration with the SEN supervisor acts as a barrier to the implementation of PT. Their responses can be categorised into three broad reasons. First, teachers described a lack of school visits and communication with SEN supervisors (S4ST5): “if my supervisor came to me this for sure would facilitate my work” (S6ST2). One SEN teacher lamented that:

My communication with the supervisor is, sorry to say that, but it is not effective, what really makes me sad is that when I try to call my supervisor, she will never answer me. I do not why; we each hold the same certificate... We do not have contact with them for two months and more, so if I call her this means that I need her, I even suffered to find her number... This is a new experience for me to teach middle school students, it is totally different from

primary. I wanted her to have a look at my work as I do not want to do something wrong (S5ST9).

On average, only one or two visits were made to schools by SEN supervisors in this study. SEN supervisors attributed this to their workload and the large number of cases and special needs programmes that they run. As one SEN supervisor noted:

During the year, there are some schools which I do not visit... Our visits are not regular because of the many administrative tasks and programmes that we have [SpLD programmes], as well as the large number of cases [SpLD students] that we have to follow. Sometimes cases come to us here in our office, because they need to be followed up with the parents. These administrative tasks prevent us from following up with the schools regularly (SS2).

SEN supervisors argued that they visited SEN teachers more often when they were new, when they have come from another school, or when they are not performing well (SS4) (SS6). On these occasions, they visit twice per semester.

Secondly, some participants stated that supervision and encouragement from supervisors was limited toward implementing PT, because supervisors like routine and they are “not interested in the strategies that I am using to help SpLD students” (S1ST4) (S3ST8). In some cases, supervisors do not examine the PT programmes, instead focusing on teacher assessment (S5ST7). The SEN teachers expressed a great deal of exasperation about this lack of support, claiming that, “I really need her to supervise my implementation of PT, to guide me in my work” (S4ST5).

The third area of contention concerns the lack of support provided by supervisors to SEN teachers to facilitate collaboration with mainstream

teachers. One teacher noted that her supervisor had told her, “you have to solve the other problems with the teachers yourself” (S3ST8). In this sense, half of the SEN supervisors supported this action, arguing that the role of SEN supervisor was to provide “psychological support to the teachers by saying they are able” (SS1). They therefore believed that SEN teachers should be responsible for solving emergent problems:

We have all reached the age of 30 and above, so we are able to solve any problem... If I face an educational or social problem with a student or in my home, I am a human with the abilities given to me by God. So I solve the problem using any ways, whether it [the problem] is easy or difficult (SS4).

One SEN supervisor added that forcing collaboration between mainstream teachers to and SEN teachers would ultimately destroy the relationships between them, stating that:

We can force them [mainstream teachers] but I do not want to work in this way. I want her to accept it by herself, because the student is with her [in the mainstream classroom] and so me [SEN teacher] and her [mainstream teacher] are sharing the student, so I need her and she need me. I need to ask her ‘what you did with the student, and how, what worked and what did not work with the student?’ As a teacher, I benefit from the strategies she is using, so I do not want the relationship to be like this. Sure I [SEN supervisor] can force her by sending a letter that obliges her, something that comes from us [supervisory office] but it is not nice to treat her in this way. We always try to solve problems in a friendly way (SS6).

Only three SEN teachers agreed with the statement that their supervisors facilitated their work. They explained that the supervisors had introduced the concept of PT to them (S6ST1), rewarded them, and given them considerable

freedom and flexibility in the delivery of teaching methods: “my supervisor is a big supporter” (S6ST1) and “she does not limit you in a circle and tells you not do this, we do not want that” (S2ST6). Two SEN supervisors supported this position, stating that they believed that their role was to, “explain the working mechanism... and give flexibility, each teacher has her own method and style in implementing PT” (SS3). Nevertheless, the general findings of the research showed that the majority of the SEN teachers believed that their supervisors should play a much more significant and involved role in the design and delivery of PT programmes.

Community is a fundamentally important construct in AT, because it represents the history and influence that affects the activity system itself. This study has shown that there are additional layers of complexity and associated tensions that arise from the interaction of the differing communities involved in the design and delivery of PT programmes. The data showed a general lack of collaboration between community members, exacerbated by limited understanding of the meaning, objects and importance of this educational strategy.

The main contribution made by school administrators in this study was the simple granting of permission for the programme to be run. Only two teachers stated that their schools also provided financial support or facilitated rewards. The main barriers arising at this level were the attitude of neglecting SEN teachers, taking no active role in the implementation of PT, and the failure to resolve conflicts between teachers. Another significant barrier to PT was the lack of collaboration between SEN teachers and mainstream teachers, and the lack of awareness among SEN teachers regarding the role of school counsellors in this area. In fact, only one SEN teacher observed that the lack of collaboration with her school counsellor adversely affected her implementation of PT. Finally, the findings show almost unanimous support for supervisors to undertake the recruitment and support of more SEN

teachers, based on the belief that this would significantly improve PT practices.

4.7 Rules

The seven dimension of AT pertains to the various rules governing PT. These policies and conventions and include school instructions or the official guidelines established by official bodies, such as the MoE or the GASE, are represented and upheld by SEN supervisors.

In this study, all SEN teachers agreed that there was a paucity of appropriate policies and the lack of clarity in the available guidelines constitute substantial barriers to the implementation of PT. Perhaps unsurprisingly, SEN supervisors held a different view, placing the onus on individual SEN teachers to research, adapt and implement techniques for their own local conditions (e.g. number of students, level of collaboration, or available resources). This section discusses these perspectives and presents a number of suggestions from the participants who sought to facilitate and develop the current practices.

4.7.1 Lack of systemic support regarding peer tutoring

SEN teachers were asked about the policies and guidelines regarding their pedagogy. They considered the lack of policies to be a significant obstacle to the effective implementation of PT, with the only available guidelines for PT being written in the GSpLD. These guidelines were extensively criticised by SEN teachers for their lack of clarity and thoroughness: “I honestly did not rely on it, it is brief and very theoretical, it does not match the reality, the problems we face are very different” (S1ST4), “the guide just introduces

strategy with no details or specific guidelines that suit our work with SpLD students” (S6ST2). Another teacher added that:

We all rely on our own searches and our individual work, they introduce it for us loosely, but the description of PT does not exceed one page in the teacher guide: it just says that PT is this, this and this... It is an individual effort and you will notice that when you observe me or other teachers that everyone has their own personal way of bringing this strategy into their classroom. You might see something that one teacher does but other teachers do not. This does not mean that I am right or they are wrong, no – we are all right as long as we reach a good result. I am always saying to my colleagues that your work with your students is exactly like your relationships with your friends. You might be successful but when someone comes to you and says, ‘how do you do this thing?’ you cannot explain to them how to do it in a way that works for them (S2ST6).

Although workshops have been provided in order to clarify the policies laid out in these official guidelines, including those related to PT, half the SEN teachers expressed their dissatisfaction with the experience, saying that “they talked about PT in general without considering our school environment and the problems that we might face” (S1ST3). Another SEN teacher asserted that:

They presented videos of some implementations of PT in our training course, but they were all foreign. I always say to them that regrettably you give us foreign studies, give us studies from here: our reality is different, our learning environment is different, our numbers are different, our cultural environment is different, and our societies are different. How can you bring foreign studies and

tell us to do the same thing in our classrooms?! It might have worked with those people, but only after they looked at their own situation and saw how PT could suit them. It is wrong to bring something from there and say it will work here. I should first try it out here. This is my fourth year as a teacher in middle school, and yes, thank God, each year I am becoming more skilled in implementing a range of teaching strategies – including PT – but I still work in a very difficult environment. I am a teacher for students with learning difficulties, even though that is not necessarily something I specialise in. As SEN teachers, we do not have a specific procedure to follow, not like mainstream teachers who are restricted by the curriculum and by certain teaching methods. Rather, my work is based on attempting to find the thing that I am skilled in and then implementing it (S2ST6).

As a consequence of the lack of clear, appropriate policies, more than half of the teachers expressed uncertainty about their methods for implementing PT. One SEN teacher reported that, “I am implementing PT as you see without any guidelines... I do not know whether it is right or wrong” (S3ST8). In addition to the lack of written guidelines, SEN teachers also complained that SEN supervisors played almost no role in guiding or directing their current PT. Instead, they are forced to research their own approaches and “do what I think would work for my students” (S5ST7). Many SEN teachers reported that their supervisors took a very hands off approach and encouraged them to find their own solutions, based on their perception of student needs: “she said I do not want to tell you to do this and do not do that, I would like you to see what students need” (S5ST9) (S1ST4). Two SEN teachers even said that their supervisors were not aware about their implementation of PT: “our supervisor initially did not know that some SEN teachers have implemented PT until she came and saw the results of the implementation” (S1ST3) and “she [her

supervisor] actually does not know what strategies I am using until she visits me and asks” (S3ST8). As a consequence of this attitude, three SEN teachers claimed that their supervisors gave them flexibility, but made no other contribution to the implementation of PT programmes. The SEN teachers attributed this to the fact that they have “more experience than the SEN supervisors” (S2ST6).

However, while SEN supervisors confirmed the lack of policies and guidelines for PT, they did not consider this scarcity to be a barrier to the implementation. Instead, they argued that SEN teachers had a responsibility to search, read and consult each other to find solutions to the problems they might face. One SEN supervisor commented that:

Many teachers do not implement PT because there are no practical guidelines for PT. I always say that we are demanding our students to self-study, so you as a teacher do not wait for your supervisor to come to give you some guidelines and ask you to follow them as they are. As you see, the guide just sheds light; we cannot give all the details. I think now Mr. Google can help you to reach any book by searching for it. Teachers can search for PT on Google and read about it. The supervisor cannot give them the guidelines for all the strategies, they have to search for the best approach and find its details. They will not see the disadvantages until they try (SS1).

Moreover, one SEN supervisor attributed any failure in PT programmes to the refusal of SEN teachers to change their teaching habits, as well as to their negative attitudes about abilities and potential of SpLD students, rather than the lack of guidelines. She argued that:

Our teachers rely widely on individual teaching, they refuse to implement PT... they always look down on SpLD students and say

that ‘they do not know, they cannot do’. Why are students in other countries able to do things that our students cannot? Students in other countries can write a book, can work as a cashier for example, can do independent work... it is the motivation of the teacher... our teachers do not like their specialty (SS2).

4.7.2 Limited holistic approach to SEN issues (diagnosis and teaching provision)

The findings of this study also illustrated that there is not only a shortage and a lack of clarity in the policies relating to PT, but also in the general policies of the entire middle school SpLD programme. These differences were reflected in poor levels of consistency between SEN teachers about diagnostic tests and working mechanisms, including the provision of support for SpLD students. For example, the lack of official policy documents and diagnostic tests for middle schools resulted in some SEN teachers relying on level five diagnostic tests from the primary school stage, which they used to identify problems with basic skills (S5ST7). Supervisors said that they should use these tests or design their own (S1ST4). This led some teachers to use the middle school curriculum to design new tests, or use ones written by their colleagues:

The diagnostic tests for primary school stage are exhaustive because they assess all the skills, this is really not logical at all, middle school students should not obtain all the previous skills that they studied in primary, some skills are not important for their future (S2ST6).

While some SEN teachers focused on the aforementioned primary skills that were especially challenging for SpLD students, others elected to concentrate on helping students with the difficulties that they faced in their current

subjects. Two SEN teachers argued that their role was to teach learning strategies that fostered independent learning, such as note taking or concept maps, rather than focusing on middle school subjects. One teacher stated:

We do not have a specific curriculum and we are not required to implement a certain method... I decided not to teach the academic skills and not to follow an individual plan that includes the weak points of students... My role should be to teach the student how to learn and how to search for the information, to select the important information (S2ST6).

Another SEN teacher stated her focus on social and psychological support for students, rather than teaching academic skills, because of a belief that “there is no correct structure for the SpLD programme at middle school stage... I believe that if students have a healthy social and psychological status, [so] they will have better academic performance” (S1ST3). This perception was widely supported by most of the SEN teachers, who seemed to treat their SpLD students like their own children, with the concept of *Binty* “my daughter” emerging frequently during the initial analysis in Arabic. While it is important for teachers to establish a warm and trusting relationships with students, an educator being personally involved with a student as though she is a part of her family is a very family oriented approach and blurs the roles between teachers and mothers (James, 2010, 2012). The results also suggest a haphazard approach to teachers’ roles in providing SEN services showing a great deal of variation in the focus and delivery of subject based curriculum, study skills, as well as in offering social and psychological support.

4.7.3 Institutionalizing peer tutoring (direct involvement of the MoE)

Despite SEN supervisors stressing the importance of PT in supporting SEN students, the results showed that most viewed PT as “not compulsory” (SS4),

meaning that teachers were given “the freedom to choose the strategy that suits them and benefits the students” (SS1). Half of the SEN supervisors explained that various teaching methods should be used to facilitate the understanding of SpLD students. Supervisors claimed to have “added more strategies, in addition to the strategies that are written in the guide, and asked teachers to search and not limit themselves to these strategies” (SS6).

It is apparent, upon reviewing the evaluation form utilised by SEN supervisors to assess the performance of SEN teachers, that assessment was based on the use of different teaching strategies. However, no priority was given to the types of strategies used with SpLD students. In other words, the form only enabled a superficial assessment of various teaching strategies, by limiting SEN supervisors to selecting whether or not a strategy has been implemented via a tick box, with an option to write additional comments.

The responses of the participants provided three main suggestions for improving current PT practices. First, they recommended establishing a practical guide for PT to clearly set out the pillars of this approach:

I suggest that my colleagues and I should have a model of PT, or an official paper like the RSEIP, which should be clear. I hope to have a model or an assessment sheet that outlines the pillars of PT. We need something comprehensive. I hope to implement PT like other teachers, so we all share the same way of implementing PT, I do not want to implement PT in one way and others implement it in another way, all based on personal efforts. It would be better to have a model or official rule that all SEN teachers can use. This would be clearer for us because some SEN teachers do not know how to implement PT. It is important to document my work by following a practical model of PT in my personal note [teaching plans]. There should be criteria or unified instructions in all the

regions about PT and how to implement it, as well as training courses (S6ST1).

Second, two SEN teachers suggested making PT compulsory, with one commenting that:

Ideally, PT should be endorsed by supervisory offices. Its implementation should be followed up and there should be training packages provided to us. This means that the supervisor should come along with the training packages and give a training workshop or something similar in order to train mainstream teachers and me as a SEN teacher. PT should be implemented in a more effective way, like other approaches... It [PT] enriches and relieves burdens, so why are we look for something that might increase these burdens if there is a strategy that can benefit us and reduce our workload (S4ST5).

One SEN supervisor supported this idea, because it would “result in arranging a specific procedure for the rewards that will be given to peer tutors to encourage other students to participate” (SS3).

Third, most SEN teachers recommended adding clear explanations to the GSpLD, with one supervisor conceding that the current contents were insufficient. She was therefore encouraged to work with SEN teachers to establish an explanatory note for the guide by clarifying the important points and excluding the unimportant ones:

We designed a memo... something like a map of the stages that a SEN teacher should pass through, from the beginning to the end of the year, what you have to do, like a future plan, so at the end of the year, I should have done all of these things. My teachers [SEN teachers] and I worked on this and call it ‘an explanatory note’

because when we received the GSpLD, it was rigid. So we read it and sat with each other for a whole day workshop and refuted its items. We approved the important items and excluded the others that we feel are not important and can make teacher lost. On the last page, you can see that we designed a cognitive map (SS4).

The data showed that the lack of policies and guidelines constituted a profound barrier to the implementation of PT, not least because all SEN teachers were forced to rely on their own individual efforts to implement these kinds of programmes. The non-involvement by SEN supervisors in terms of the guidance and development of the current practices of PT was another serious obstacle. This was exacerbated by an apparent lack of awareness among headteachers about the operation and benefits of PT, which has resulted in a lack of school level instructions. This meant that many SEN teachers lacked direction in their implementation of classroom techniques. This was found consistently across the middle school level and was worsened by a lack of official policies or guidance on SpLD programmes, which necessarily affected the clarity and consistency of the work performed by SEN teachers.

4.8 Conclusion

This chapter has presented the study findings around the seven dimensions of the AT (see section 4.1), namely subject, object, outcomes, tools, division of labour, community and rules. These dimensions guided the presentation of the key aspects of the implementations of PT in the context of this study. These include the meanings of PT, its perceived aims and effectiveness, resources, teachers' and students' roles, collaboration between teachers, SEN supervisors and other school staff as well as official PT policies and guidelines. Almost all of the participants perceived PT as a unidirectional

educational approach, in which SpLD students always needed support so should only be tutees. The PT activities reflected the dominant teacher-centred approach. Peer tutors were perceived by the majority of participants as being a ‘small teacher’, with similar responsibilities to the classroom teacher. Three SEN teachers, two SEN supervisors and two mainstream students preferred to call tutors as ‘friends’ to encourage participation and emphasise the responsibility of tutors on providing advice and help in the lessons most difficult for SpLD students.

Almost all SEN teachers and supervisors perceived PT as a problem-solving technique for issues like curriculum changes, limited subject-specific knowledge among SEN teachers, or the work pressure in Saudi middle schools. This perception of PT was a major motivation for its implementation by SEN teachers, meaning that PT functioned as an administrative instrument rather than an inclusive pedagogy. Most participants also recognised it as a teaching method to provide academic support for SEN students, with tutors providing valuable help in clarifying difficult lessons, helping SpLD students to memorise information, or helping with homework and exam preparation. PT was perceived as being able to foster inclusive learning environments in schools. In addition, SEN teachers and SEN supervisors stated that PT provided important developmental roles, such as socio-emotional support and establishing a sense of belonging for SpLD students. The data showed that PT was broadly perceived as an effective way to increase the confidence of SpLD students. Teachers and supervisors attributed this to the experience of being cared for and made to feel worthwhile, whereas mainstream students attributed gains to the opportunities for SpLD students to express themselves and socialise with their peers. SpLD students attributed their improved confidence to improvements in their academic performance, as well as encouragement from peer tutors. SEN teachers also claimed that PT was effective strategy for providing socio-emotional support to SpLD students.

However, some students felt that PT was ineffective in socio-emotional contexts because of the lack of support from mainstream students, exacerbated SpLD students' fear of social relationships and corresponding reluctance to speak.

The vast majority of participants considered PT an effective tool to support the academic development of pupils with SpLD, improving their educational performance through increased motivation and participation. SEN teachers and supervisors provided different justifications for the effectiveness of PT in improving academic skills, such as the ability of tutors to act as a model for SpLD students, who were encouraged to imitate them and obtain better grades in exams. Furthermore, PT created a relaxed atmosphere, encouraging SpLD students to express themselves, ask questions and receive necessary clarifications on difficult topics. Tutors also played an important role in repackaging classroom information to improve understanding of lessons. SpLD students confirmed the simplification of information and the relaxed learning atmosphere enabled by PT, adding that the provision of individual teaching helped them to make academic improvements. Finally, SEN teachers and supervisors argued that PT fostered inclusive learning environments. However, no consensus was found among mainstream or SpLD students on this matter, with some claiming that negative attitudes towards disability among mainstream students and the poor communication skills of SpLD students prevent inclusion.

Some positive elements of this method were reported under the dimension of community. These included the decision of headteachers to give permission to implement PT, the financial support from some school administrators, and the flexibility that all SEN supervisors offered to SEN teachers. Other positive elements were also reported under the sub-themes of training and supervision, such as establishing familiarity among students prior to the implementation of PT programmes, clarifying the definition and aims of PT for students,

rewarding mainstream students, and obtaining feedback and self-reflection from SpLD students.

However, challenges to the effective implementation of these programmes were identified. The most significant were as follows: the lack of physical resources and human resources, limited time, insufficient training, poor levels of collaboration and lack of provision in educational policies. In almost all cases, the physical environment was considered a major barrier to PT, as manifested through the combination of limited available space, large class sizes, and a lack of physical resources (technology devices and educational aids). In terms of human resources, SEN teachers called for the introduction of TAs in schools and the recruitment of more SEN teachers and supervisors. Additionally, while some SEN teachers believed that PT could support their ability to meet work commitments, scheduling issues and subject commitments limited the available time to implement programmes.

All SEN teachers highlighted limited training as a significant barrier to PT, requiring their reliance on personal research and informal development with colleagues. Many SEN teachers felt that this situation was complicated by the lack of support from SEN supervisors and consequently called for greater supervision, involvement, and more visits to their schools. Additionally, the lack of collaboration between SEN teachers and mainstream teachers was attributed to negative attitudes towards SEN teachers, and a general lack of awareness about the role of SEN teachers and the potential effectiveness of PT. School administrators seemed to play no role in the resolution of conflicts between teachers.

The implementation of PT was inhibited by a range of factors, including a lack of policies, instructions from schools, and limited practical guidelines on running programmes. Some SEN teachers requested a framework or manuals to inform teaching strategies and establish a consistent pedagogy, taking into

consideration the culture, learning system and resources available to schools in Saudi Arabia.

Chapter Five Discussion of Findings

5.1 Introduction

This study sought to identify perceptions about the nature and implementation of PT in schools in Saudi Arabia, with particular reference to its perceived effectiveness and applicability for students with SpLD, within the national religious-cultural framework. This necessitated an exhaustive exploration of the western concept of PT and the operation of the meanings and understandings of this concept in the Saudi Arabian context. The conceptual analytic framework used to study the implementations of PT in the Saudi Arabian context was AT, which enabled the examination of the influence of participants' beliefs and values, resources, relationships among professionals, and educational policies.

Of the numerous forms of PT discussed in the extant literature, those implemented with Saudi children with SpLD have tended to focus on asymmetric relationships among students within same-age tutoring. In this study, the structure of PT reflected a model in which teachers were perceived as knowledge transmitters, with tutor-directed learning placing students with SpLD in a passive role. The understanding of PT and its implementation in middle school settings were influenced by concepts of 'weakness', 'superiority' and especially 'normality', with diversity being neglected. Educators and supervisors understood PT as a problem-solving technique, serving as a resource for teachers of students with SEN. This practice of using non-disabled students to address gaps in teacher knowledge and workload demands however raised serious ethical concerns.

The majority of participants in this study recognised the effectiveness of PT as a tool for supporting learning, although teacher and student perspectives

diverged regarding its benefits. The majority of SEN teachers agreed that PT was implemented to achieve the academic and socio-emotional development of SpLD students. However, students were unaware of the socio-emotional aims of PT, resulting in the tendency for tutors to provide only academic support for their peers. This different understanding reflects ineffective collaboration and poor systemic planning on behalf of SEN teachers, because students were not properly informed about the aims of PT sessions. This was compounded by a failure to monitor the behaviour of peer tutors.

The findings suggested that PT implementation was hindered by poor training, poor collaboration between staff, insufficient support by SEN supervisors, limited or insufficient buildings/physical space, and shortcomings in official government policy. This was evident in the insufficient understanding of PT in Saudi culture and a corresponding lack of guidelines for SEN teachers, leading to the responsibility for the implementation PT being overwhelmingly delegated to teachers.

5.2 The Nature and Scope of Peer Tutoring in Saudi Arabia

The findings on the meaning of PT, particularly within the Saudi context, highlighted the implementation of this classroom strategy in schools and the interaction that occurred between participating students. This section discusses these issues and the effects of key concepts, such as normality, weakness and superiority, on the understanding of peer support and the selection of tutors, in addition to examining the authority of knowledge within PT activities and the ethics of addressing insufficient teacher knowledge through the use of peer tutors.

5.2.1 The asymmetric relationship (the notion of normality and weakness)

PT was commonly perceived as an asymmetric relationship, with the higher status student in a support-giving role. This perception of PT as a unidirectional teaching approach was reflected in the responses of SEN teachers and supervisors, who explained the importance of ensuring that one student in each pair should be a superior student who is able to teach difficult lessons and explain complex concepts. This was mirrored in comments that explained how a peer tutor should be “excellent in the subject to provide help and support to the student with SpLD” (SS4), and “skilled in the subject, distinctive... and are able to deliver the information” (S5ST7).

This perception of PT supports Vygotsky’s social constructivism theory of learning (Haider and Yasmin, 2015; Shamir and Lazerovitz, 2007; Clarkson and Luca, 2002), particularly regarding children with SEN (Iyer, 2011). In this theory, tutors should generate learning within their tutees’ ZPD and through social interaction (Vygotsky, 1978), with this ‘scaffolding’ by more capable partners enabling the acquisition of knowledge (Haider and Yasmin, 2015). The success of PT is dependent on this ability of tutors to provide a cognitive model of learning, to evaluate and improve the performance of their partners (Clarkson and Luca, 2002).

According to teachers, the primary aim of peer tutors was to communicate with their partners, leading to the development of their skills and abilities. In effect, the social environment was viewed as a source of mental development, rather than simply the context for learning. Inclusive education can enhance student development, with peer tutors offering the individualised support required for disabled students to succeed in mainstream settings. This support includes note taking, reading materials aloud (Bond and Castagner, 2006), or explaining instructions or assignments. Peer group observations indicated that

SEN students benefited from the ongoing widening of their ZPD (Zuckerman, 1994).

Nevertheless, observations and initial analysis of the data in Arabic language showed that supervisors and SEN teachers tended to concentrate on the limitations of SpLD students. The concepts of normality and weakness have specific meanings in Arabic, which may not have emerged or may have been lost in the English translation. The SEN teachers and supervisors commonly used the phrase ‘normal students’ to denote students without SEN, differentiating them from pupils in terms of their academic abilities. Although deviation from normality means being different rather than abnormal, SEN teachers and supervisors habitually used this phraseology. However, this word choice can lead to stigmatisation of pupils with SEN, even when the speaker has good intentions. For instance, some mainstream students and even some SEN teachers defined SpLD students through their weaknesses: “we select normal students to provide teaching support to our weak students” (S5ST7). While this position was used to discuss academic achievement, it reflects a lack of understanding of SpLD, implying that these students are unmotivated or incapable, or that they would perform poorly in all subjects.

The notion of normality is rooted in traditional approaches to SEN (Garner, 2009), in which normality is measured in relation to the abilities, physical health, impairment and interactions in environment. Many people with SEN wish to gain acceptance through being ‘normal’ (Garner, 2009). This means that students who possess communication skills, who learn effectively, and who do not seem different are more likely to be socially and educationally included in their school. Therefore, the criteria of normality distinguish between normal and abnormal people, based upon an erroneous assessed of individuals in terms of what they cannot do. This position is closely linked to the medical model of disability (Shah and Mountain, 2007) which focuses on the weaknesses of SEN students, without consideration of their wants or

needs (Haegele and Hodge, 2016). Despite the essential role of medical professionals in the world of health, their labels and categories are primarily based on body functions, human abilities and impairments (Haegele and Hodge, 2016), which can adversely affect perceptions of disability. In particular, conflating disability with sickness can result in people's impairments being viewed as deficiencies. This labelling has led people to self-restrict their available options and can also influence the way that a society perceives and interacts with individuals who have disabilities (Barton, 2009).

Traditionally disability in the Saudi context has been viewed as a source of stigma and shame (*doxa*) (Al-hano, 2006). In Arab societies, people with disabilities are often largely invisible, especially if they have intellectual or developmental impairments (Al-Thani, 2006). Disabled women in Arab countries used to suffer further marginalisation, often exacerbated by the traditional collective culture, the core social and economic unit in the Arab world, which stresses conformity to the family group (Patai, 2002). The status of the family is paramount and is determined in relation to compliance with societal norms (*doxa*) (Patai, 2002). This creates stability in the family unit, but is harmful to the acceptance and valuing of difference of the family members. In effect, disability is stigmatised in traditional collective culture because it deviates from normality. As a consequence, many Arabs will prioritise social status and public image over their children's individual needs.

Labels have been extensively studied in the field of special education and disability. They can be effective tools to identify those who need assistance with learning (Norwich, 1993), but they can also have profound negative implications. Because values and thoughts are passed down through language, labels have the power to include and to exclude (Ballard, 2004). Labels can shape expectations and create negative impressions, influencing the perception that people have about disabilities (Kelly and Norwich, 2004).

Labels that describe individuals with intellectual impairments, such as SEN, have been criticised for negatively marking people as different and therefore discriminating them within society (Solity, 1991). The notion of normality is highly associated with the language of social exclusion, because it considers abnormality as whatever is perceived as the constructed standard of society (McIntosh, 2006; Messiou, 2006). In summary, greater deviation from these norms is associated with greater marginalisation of the individual in terms of equality, social justice and the right to participation (Tucker, 1990).

Because of this, it is important to avoid over-generalisations of normality (Luxford, 1994) and to strive for unprejudiced judgement and receptiveness to new ideas. The importance of overcoming negativity, limiting the use of labelling and striving for objectivity is well-established:

Essentially we do not really have the right to talk about normality or abnormality in a child's inner life, nor indeed in the inner life of human beings altogether... One does not gain much from such labelling, and the first thing to happen should be that the physician or the teacher rejects such an assessment, and goes further than saying that something is clever or sensible according to the way people are habitually thinking (Steiner, 1924, as cited in Steiner, 2014, p. 2).

In effect, individuals should not be judged in terms of their disabilities and should instead be encouraged to recognise and activate their strengths to reach their potential (Blackburn and Witzel, 2013). This perspective is linked to the capability approach, which focuses on human growth through access to opportunities and resources that uphold individual rights. In the case of SEN students, this refers to the activation of capabilities rather than emphasising impairment.

Nonetheless, participants in this study used negative labels like ‘handicap’ and ‘weakness’ (*doxa*), which can be a major barrier to progression of PT (*habitus*). The use of such language in the context of special education can marginalise SpLD students, even when the labels are not used consciously or maliciously. This can prevent students with SEN from enjoying the same opportunities as mainstream students. This is contrary to the idea of the capability approach, which seeks to overcome cultural and social barriers, such as stigmatised labels that highlight the weaknesses of SEN students and limit their opportunities to discover or develop their individual capabilities. In this study, this stigma was seen in the limitation of SpLD students to the role of tutees, reflecting asymmetrical relationships between peers. This is a linear and antiquated perception of peer learning, with the tutor as a helper, positioned between teacher and learner, despite the potential of PT to offer more reciprocal relationships based on mutual support (De Smet, 2008; Topping, 2005). However, it is important to note that the objective of the capability approach is to offer equal opportunities, rather than equal outcomes, giving SEN students the opportunities to maximise and expand their opportunities for personal betterment.

There has been a growing interest in the reciprocal relationships among students that enable role exchange during PT activities (De Backer, Van Keer and Valcke, 2015; Oddo et al., 2010; Cheng and Ku, 2009; Sutherland and Snyder, 2007; Dufrene et al., 2005). These are common in effective PT, with both parties acting as the tutor and tutee during a session (Eskay et al., 2012). This approach avoids power imbalance, which is especially important for SpLD students, as they commonly have low self-esteem and little confidence (Nasen, 2015). When mainstream students are selected for the role of tutors, common prejudices relating to disability marginalisation are likely to be reinforced, thereby inhibiting mutual respect and integration. Therefore, PT should provide opportunities for reciprocal interactions that enable

knowledge and experience to be shared between students (Hellmer, 2012). This effectively means a movement towards interdependent learning, in which students work with and learn from one another. Eskay et al. (2012) argued that PT should involve reciprocal interactions, with students striving towards mutual benefit and attainment of their learning goals, thereby maximising their learning. In fact, some suggest that the reciprocal nature of the arrangement distinguishes structured PT from unplanned classrooms events, such as when a student helps their classmate because they have already finished their work (Heron et al., 2006).

5.2.2 The profile of students (the notion of superior and the criteria used for choosing tutors)

When choosing peer tutors, one of the main selection criteria for all SEN was excellence and superiority of the student. The notion of ‘superior’ encourages asymmetrical relationships, placing expectations on tutors to be properly prepared. SEN teachers understood excellence in terms of the ability of students to understand the course content, stating that a peer tutor should be, “skilled in the subject and distinctive” (S5ST7). In addition, potential tutors were required to display sufficient pedagogical skills: “she [peer tutor] has to deliver the correct information to my girls [SpLD students], because they will retain any information they learn” (S5ST9). Finally, teachers stated that tutors should have good attendance and complete all tasks set (S1ST4). More than half of the SEN supervisors (e.g. SS4) shared these views. These criteria resulted in the assumption by the vast majority of SEN teachers that only mainstream students were competent to tutor their peers with SpLD. This indicates a shared belief that students with SpLD always require support from others (e.g. S4ST5), with evidence showing that the most effective PT pairs are those composed of students with different levels of skills (Tymms et al., 2011; Kunsch, Jitendra and Sood, 2007; Allsop, 1997). While the

development of academic performance is best achieved by having a tutor with superior knowledge of the material (Kunsch, Jitendra and Sood, 2007), the learning process also benefits from the reduction of competition that comes from pairing students of different ability levels. Organising peer tutors from different learning backgrounds may offer opportunities for students without disabilities to assist those with disabilities (Cervantes et al., 2013).

In contrast, developments in PT have led to interest in matching students with more similar capabilities, as this allows both participants to benefit from cognitively challenging activities (*habitus*). Grouping similar students together is a credible model that helps the tutor to learn by teaching their partner (Topping, 2005). Similarity in skills and age can help both parties in appropriately structured contexts and programmes (Duran and Monereo, 2005). Those individuals who are especially competent tend to promote learning of curricular material, without any expertise in the content (Duran and Monereo, 2005). According to this definition of PT, paired projects are beneficial to both the tutor and tutee (Topping, 2005), with a growing body of research emphasising the unique characteristics of this approach, including “equality of opportunity, mutual assistance, shared goals, interdependency and group cohesion” (Harper and Maheady, 2007, p. 102). The equal opportunity model gives all students in a classroom the chance to be a tutor, regardless of their academic superiority (Xu, 2015), which promotes academic attainment and reduces stigma associated with poor academic performance. Students participating in CWPT have included: typically developing children (Song et al., 2018); students with attention deficit disorder / attention deficit hyperactivity disorder (e.g. Harlacher, Roberts and Merrell, 2006); emotional/behavioural disorders (e.g. Jo, 2015); hearing disabilities (e.g. Herring-Harrison, Garder and Lovelace, 2007); and learning disabilities (e.g. Hughes and Fredrick- 2006), ranging from mild disabilities (e.g. Sideridis et al., 1997) to moderate and severe disabilities (e.g.

McDonnell, 2011). Tutors with SEN often provide specific academic benefits (Burns, 2006), even for tutees without LD (Hughes and Fredrick, 2006).

However, this was not observed within the Saudi Arabian model for two main reasons. First, more than half of the SEN teachers in this study considered students with SpLD to be unable to teach their peers (*doxa*). Second, approximately half of the participating SEN teachers and supervisors viewed PT as a problem-solving approach to overcome learning and social difficulties. For instance, two of nine SEN teachers reported that eligibility for PT support is largely dependent on tutees having moderate to severe difficulties, stating that “students who have a mild difficulty do not need a peer tutor because they can help themselves” (S6ST1) (S2ST6). This approach to PT resembles Haider and Yasmin’s (2015) model, which stated that the stronger member of each pair provides essential mechanisms like “questioning, suggesting, displaying, narrating, boosting and recapping” (p.170). They argued that this kind of assistance helps less competent students to learn to solve tasks independently (Haider and Yasmin, 2015). Two SEN teachers also cited socio-emotional needs as being important selection criteria for being a tutee, with shy or isolated students particularly needing peer tutor support. On this topic, teachers said:

Regarding SpLD students, I select those who really need a tutor, either because they do not have friends or they do not have self-confidence, who cannot ask, who have difficulties asking. Not all SpLD students have this difficulty; some of them can ask for anything (S1ST3) (S3ST8).

Choosing excellent students for tutors offers certain possible benefits. However, this does not resolve the stigma associated with receiving support. Almost all SEN teachers tackled this problem by selecting participants according to positivity and other personal characteristics, rather than mere

academic excellence. The teachers stated that personal characteristics, broadly grouped as good ethics and collaboration, served to maintain respectful, caring and productive peer relationships. In this sense, teachers asserted that peer tutors should be sympathetic and “respect SpLD students’ feelings and not be arrogant” (S2ST6), as well as being “polite and need to have good manners” (S1ST4). Teachers stated that, “SpLD students are very sensitive and they can be hurt easily” (S6ST1). Therefore, peer tutors, “have to talk with SpLD students by using appropriate language, they have to listen while they are talking and give them enough time to think and answer, they have to feel the responsibility” (S5ST7). Additionally, five of nine teachers stressed that tutors, “have to love collaboration, they should have ambition and a desire to make something, to help their friends” (S2ST6), as well as being enthusiastic and “an active participator in their classrooms” (S3ST8). Regarding the need for a positive attitude, all teachers agreed that SpLD students should accept being taught by their friends, although one teacher conceded, “not all students accept this” (S2ST6). Teachers also stressed the importance of voluntary participation, stating that peer tutors had to display “ambition and willingness to support their friends” (S3ST8), as SpLD students would not benefit from tutors who were forced to support them and could even be bullied by their tutors. This position was supported by the attitudes that almost all typically developing and SpLD students expressed regarding PT.

Despite the importance of positive personal characteristics in peer tutor selection, few studies have investigated selection guidelines. Consideration of this criterion during programme design could provide valuable insights into the influence of personal attributes on PT effectiveness, especially with students with SpLD. Nevertheless, some PT projects have acknowledged the importance of selecting characteristics like “sensitivity, patience, responsibility, and commitment” (Kowalsky and Fresko, 2002, p. 264);

strong intrinsic motivation and communication skills (Yip, 2004); a willingness to share experiences (Lin et al., 2016); and generally demonstrating appropriate behaviours (Wright and Cleary, 2006).

5.2.3 The pedagogy of Peer Tutoring (the authority of knowledge)

Learning in PT is a collaborative process that occurs during tutoring (Boud and Solomon, 2001; Bruffee, 1999). It is therefore important to examine the authority of knowledge within tutoring activities, something that was not taken into account in this study. Successful autonomous collaboration requires interactions among students to include three principles: friendliness, willingness to shift authority, and the ability to exercise authority (Bruffee, 1994). PT supports learning through the active participation of students, with discourse and dialogue helping students to solve practical problems, rather than focusing on abstract concepts (Clarkson and Luca, 2002). This is linked to the Saudi vision 2030, which aims to implement student-centered teaching approaches that activate the role of students and improve their personal skills, creativity and confidence, as well as providing inclusive and appropriate support for SEN students. Collaborative study, social interaction and discourse all facilitate the development of understanding (Vygotsky, 1978), with PT activities helping learners to construct knowledge and scaffold the learning process (Baines, Blatchford and Kutnick, 2003).

However, the teaching strategies most commonly used by peer tutors during PT sessions reflected a model in which teachers are seen as knowledge transmitters. As a consequence, peer tutors were primarily responsible for giving explanations, instructions and information. The dominant teaching strategy was lecture-style, with tutors focusing on helping SpLD students to develop their lower-order thinking skills, such as recitation and memorisation, especially in studies of poetry or the Qur'an. Common

techniques included dividing information (S5Ss18), listening to recitations (S4Ss14), and correcting mistakes (S2ST6). These approaches placed SpLD students into a more passive role, in which they primarily listened to their tutors, followed instructions and demonstrated whether they understood their tutor. It was noticeable that SpLD students were not given the opportunity to offer their opinions on subjects and were not taught the skills to foster independence, such as memory techniques. This contrasted with recent research into PT, which has shifted focus from rote to complex learning (Falchikov, 2001; King, 1998).

The quality of talk in the tutoring role is another essential element of the joint construction of knowledge in peer learning contexts (Thurston et al., 2007), as it helps students to construct and expound upon their ideas (Bereiter, 2002) and resolve confusing situations (Brophy, 2002). Specifically, tutors should use question-response dialogues that challenge knowledge construction among students (Berghmans et al., 2013) and attempt to increase their involvement through the use of open-ended questions (Jones et al., 2006; King, 2002). The failure to encourage active participation in the construction of knowledge is likely to be counterproductive in PT, as learning occurs through the search for answers (Berghmans et al., 2014).

Nonetheless, this study found many examples of the didactic approach and knowledge-telling behaviours, as noted in other research (e.g. Roscoe, 2014; Berghmans et al., 2013; Chi et al., 2001; Graesser, Person and Magliano, 1995). This raises the question of whether PT leads to imbalanced exchanges, which would limit learner interaction. Peer tutors talked more than learners, used longer turn lengths, and employed more directive strategies, which might have created resistance when there were competing notions of expertise (Waring, 2005), limiting the benefits of PT (Back, 2016). For instance, the peer tutors in this study took too much responsibility, such as writing the answers for their friends or allowing the tutees to copy the answers directly

(S2Ss6) (S5Ss18). This may have been due to time constraints or the desire to protect their friends from punishment, but it also revealed a lack of pedagogical knowledge among tutors.

Tutor dominance in this study may be attributable to paucity of essential training (Back, 2016; Thurston et al., 2009; Verba, 1998; Fuchs et al., 1994), resulting in less interactive approaches that use longer tutor talking time and closed questions (Thurston et al., 2009). Training is essential for facilitative-tutoring strategies, both in terms of the adoption by tutors (McMaster, Fuchs and Fuchs, 2006; Rohrbeck et al., 2003) and subsequent integration (Berghmans et al., 2014). It can also clarify the distinction between knowledge-telling and knowledge-building strategies, allowing the most suitable approach to be chosen for a particular learning activity at a given moment (Roscoe, 2014). It should be noted that tutors do not always utilise informed strategies (Dufrene et al., 2005), in that they cannot support knowledge building without training (Roscoe and Chi 2007, 2008). This training of peer tutors needs to be supported by ongoing teacher supervision and guidance (Berghmans et al., 2014).

Considering the complexities of PT, other factors may contribute to the knowledge-telling bias (Roscoe, 2014). As well as being dependent on their character, the behaviour of peer tutors is shaped through interactions with the environment (Berghmans et al., 2013), such as their tendency to imitate the didactic approaches used by their teachers (Trigwell, Prosser and Waterhouse, 1999; Fuchs et al., 1994). Saudi teachers often adopted teacher-centric approaches in the classroom, rarely providing opportunities for students to be involved in a CoP through collaboration in shared activities or the opportunity to share their thoughts and experiences. These teacher's behaviour may have occurred in response to factors like limited space and large numbers of students. This behaviour may also be due to Saudi cultural bias, which emphasises the importance of repetition and memorisation

especially regarding prayers and Qur'anic verses rather than critical engagement in learning (*doxa*). It may also be due to the family oriented approach to education in Saudi Arabia (*doxa*). Teachers in this study often referred to students as 'my daughter' during interviews, with many SEN teachers treating their SpLD students as their own children. This sense of familial closeness was explained as necessary in creating, "a healthy social and psychological status, [so] they will have better academic performance" (S1ST3). The sense of caring and improved self-esteem from this approach may enable greater academic achievement (Helm, 2007; Goldstein and Lake, 2003), however it is important to be aware of the lines between teaching and caring, as well as the methods involved (James, 2010). In Saudi Arabia, the notion of caring reflects the dominance of the mother figure, who is responsible for passing down traditions, ethics and values, and can therefore manifest autocratic tendencies. It is customary for Saudi teachers to be responsible for raising their students as well as teaching them, suggesting that society also expects teachers to function as mother figures. This expectation could affect many Saudi teachers, as those observed tended to dominate the learning process by taking responsibility for the transmission of information, with little room for students to criticise, analyse and examine the knowledge. It may also have an impact on the teachers themselves who are expected to also engage in emotional labour in addition to their work responsibilities as teachers.

Teachers in the current study expressed strong support for PT, arguing that student colleagues can sometimes explain information more effectively than the teacher, because of "a common style" (S3ST8). This means that they believed that students of the same age share, "the same thoughts, the same preferences and attitudes [...] they know what teaching styles their colleagues love better than the teacher" (S6ST2). Indeed, student interactions tended to result in some degree of learning, even when peer tutors were dominant in the

interaction. This may be due to PT being a unique learning environment inside a pre-existing classroom environment (Othman, 1997). This created opportunities for learning (Graesser and Person, 1994) and offered certain advantages over traditional teacher-classroom instruction. For instance, despite the passive role given to SpLD tutees in PT sessions, observations showed that they were listening to their tutors and maintaining eye contact. Additionally, the tutees demonstrated a willingness to respond to questions, even when tutors focused on memorisation. Peer tutors also gave sufficient time for tutees to think about information and remember it, which was rarely observed in lessons directed by mainstream teachers. SpLD students confirmed this observation, saying, “I understand the lesson from my friend more than the teacher because my friend... knows how to deliver the information using a simple method” (S1Ss28). Earlier studies also found that the active and passive conditions in PT are often superior to teacher-directed classes (Madrid, Canas and Ortega- Medina, 2003).

The concept of a homogeneous PT was mentioned by one SEN supervisor, who discussed the idea of students with SpLD tutoring each other (SS2). She argued that SpLD students suffer from accumulated frustration and said, “if we assign a normal student to teach her, her self-esteem will remain low, while if we ask her to teach and give her the role of leader, her self-esteem will increase”. She added that, “the role of a normal student is to be a supporter for PT” (SS2). There is extensive support for this argument in the literature (e.g. Eskay et al., 2012; Carter et al., 2011; Shamir and Lazerovitz, 2007; Ferrari, 2004). Some studies have suggested that SEN students benefit from this in a number of ways, such as a greater sense of belonging (Bradley, 2016); increased confidence and appropriate behaviour (Blake et al., 2000); and social and emotional development, leading to improved self-concept (Kaufman and Burden, 2004).

Nevertheless, SEN teachers often neglected homogeneous PT, as well as CAPT and CWPT. This may be due to a lack of knowledge about potential options, evidenced by reactions during the interviews, when they were asked about their perceptions of these tutoring approaches. Many teachers admitted that they had never heard of these alternatives. As discussed previously, other teachers may have believed that SpLD students would not benefit from these options, or that there were obstacles to their implementation. One SEN supervisor admitted that her school environment did not allow for homogeneous tutoring, because SpLD students were not grouped together. She therefore suggested establishing “a secret classroom for all SpLD and other weak students... no one, even mainstream teachers, should know that this classroom for SpLD students exists, except SEN teachers and the headteacher” (SS2). Although this strategy might facilitate the implementation of PT among SpLD students, it might also cause discrimination and adversely affect classroom differentiation. Two of nine teachers reported that, “it is difficult to find two students with SpLD who have different strengths and weaknesses” (S5ST7). This could enable students to help peers within their zone of strength, but problems would still exist in particular, students may be in different classes and so it might be difficult to schedule them together, especially with a teacher (S5ST9). The use of tutors from an older grade was also associated with potential challenges, including scheduling issues and disruption to the existing system, with which many teachers are currently happy (S6ST1).

5.2.4 The Ethics of Peer Tutoring

There was a tendency among SEN teachers to use PT to resolve problems related to their limited subject-specific knowledge. These problems related to the expansion in the provision of special education services from an exclusive focus on primary schools to one that included both primary and middle school

students. Although the first SpLD programmes were established in a small number of middle schools in 2004 (MoE, 2018c), official and practical guidelines for these programmes only started in 2011. This situation was exacerbated by the absence of SEN preparation during teacher training. One teacher said, “we are just prepared to teach the basic skills, such as multiplication, division, addition and reading small numbers, I do not want to teach... something wrong” (S2ST6). Training for SEN teachers in Saudi Arabia only prepares them to teach SpLD students at primary school level, which affected their willingness to work in certain other contexts.

Additionally, changes to the curriculum made it more difficult for SEN teachers to teach SpLD students. Three of nine teachers attributed their lack of mastery to changes to the curriculum, as seen in statements like, “I am not skilled to teach mathematics and actually the curriculum has been changed, so it is not what we have learned” (S5ST9). Comments by supervisors supported this assertion, stating that many teachers were not confident enough to teach the middle school curriculum, with one supervisor noting that, “the fear is about specialism, so I cannot force them, as a supervisor, to understand the curriculum. The curriculum has been changed and developed” (SS3). This change occurred as part of the ‘Comprehensive Project for the Development of Curriculums’, a programme that was intended to develop up-to-date educational material to fulfil national and social requirements. This is still one of the highest priority projects at the Ministry (MoE, 2008). The content and style of the new curriculum differs from the previous programme, with new subject names, new classes and the removal or modification of existing classes. There is a long-standing principle in Saudi Arabia that children have access to the new curriculum, which has led to the new design containing an attractive, colourful summary of lessons. While it is essential for student teachers to understand the importance and design of subjects and curriculums (Bennett, 1993), the course content at Saudi universities has not kept abreast

of recent educational changes in the country, perhaps reflecting poor interaction between Saudi universities and schools. This observation is supported by Alsayegh (2014), who found little or no collaboration between Saudi schools and universities, in comparison with other countries, like Australia, the US, and many European nations. She encourages the development of partnerships between schools and universities in Saudi Arabia (Alsayegh, 2014), providing solutions for emergent issues through sharing of linguistic, social and cultural resources.

In response to these challenges, teachers in this study frequently relied on students to teach difficult subjects, with five of nine teachers reporting that they found it difficult to teach science subjects. One explained that she was unfamiliar with many aspects of the middle school science curriculum, “so I have to learn them myself, search the internet or ask for help from the students” (S5ST7). In the literature, the problem-solving aspects of PT are predominantly associated with a lack of human and financial resources (e.g. Korner and Hobf, 2014; Iyer, 2011; Colvin and Ashman, 2010; Santee and Garavalia, 2006). In addition to the use of PT to resolve weaknesses in teacher training, these programmes have classically been used as a response to a shortage of teachers, due to budgetary cuts and a rising student population (Korner and Hobf, 2014). PT can also be a way to maintain a student-to-teacher ratio (Santee and Garavalia, 2006), or a way to reduce costs, while helping students to attain academic success (Thompson, 2011). However, the practice of utilising students in this way has a number of important ethical considerations.

Prior to the commencement of a PT programme, it is essential to obtain permission from parents (Cervantes et al., 2013). Consent should be considered during the planning stage for this programme and should be obtained in written form prior to commencement, as this influences the selection procedure (Houston-Wilson et al., 1997). However, PT in this study

was implemented without prior permission or notice from the families of children, potentially damaging the relationship between parents and the school. One reason for this may be a concern among parents that their children would miss lessons, with one SEN teacher explaining that “we had complaints from parents who said that the academic level of their daughters declined because they are busy teaching their colleagues rather than completing their homework” (S5ST9). This showed the importance of raising awareness among parents about the benefits which their children might receive as a result of their participation in PT. For instance, teaching other students helps tutors to focus more materials they teach and gaining better understanding of the content of learning (Roscoe and Chil, 2007).

Many studies have examined the voluntary recruitment of peer tutor participants (e.g. Klavina et al., 2014; Harris and Shaw, 2006; Nazzal, 2002). However, few studies have examined the impact of voluntary or compulsory programmes on peer tutors. This important organisational consideration can profoundly affect the quality of learning outcomes (Topping, 2005). As mentioned previously, SEN teachers and all students agreed that PT should be voluntary, for the benefit of SpLD students. This was consistent with previous studies, which found that voluntary programmes were more suitable because they created positive relationships among participants (Medcalf, Glynn and Moore, 2004). The findings of the current study suggested that the use of voluntary systems in participating schools was for the benefit of SpLD students. Nevertheless, given their vital role, it was essential to examine the contributions of peer tutors, to ensure they were properly informed about their duties and their role in supporting SEN teachers, and to give them the right to withdraw from the programme at any stage.

The provision of rewards for peer tutors is another issue for consideration, as this can be an effective motivator for learner performance (Robinson, Schofield and Steers-Wentzell, 2005). However, it is also a way to show

appreciation for the important role that mainstream students can play in the progress of SpLD students. PT should therefore involve a system that rewards positive and cooperative behaviours (Eskay et al., 2012), which is motivating for those involved (Robinson, Schofield and Steers-Wentzell, 2005). The current study identified various types of physical to incorporeal reinforcements, which the SEN teachers unanimously stated was vital for PT to be successful. “I have to stimulate the peer tutor by calling her ‘small teacher’, I always thank her and say you are an excellent student” (S6ST1) and “I told the tutors I will give you grades. If you lose some grades in exams come to me and I will add them to you, you deserve grades for your work” (S6ST2). It should be noted that the majority of these rewards were external. The effectiveness of extrinsic and intrinsic rewards has been extensively debated in the literature. Arieno (2007) argued that extrinsic rewards are valuable, because they motivate the tutors to provide more effective sessions, thereby supporting the classroom teacher more effectively. Conversely, it has been argued that intrinsic rewards are inherently more motivating (Ryan and Deci, 2000). For example, peer tutors may be motivated by the chance for academic development, the feeling of being capable, the enjoyment of involvement in the development and delivery of a course, or by moral drives, like the desire to help SEN or less competent students (Schramm, Brown and Street, 2009; Thurston et al., 2007). This means that the moral motivation of the tutor is crucial. Social considerations can also be inherently motivating, with tutors benefitting from increased social interactions, verbal and nonverbal reinforcement, and tutee relationships (Karagiannakis, 2008; Cohen, 1986). In the wider context, the tutor role is associated with the implication of academic success, with the student becoming an active member of the academic community. The desire to help others and receive recognition were noted by participating mainstream students, such as one who wanted her friend to feel supported and able to understand class, adding that “I want my name to be in her heart” (S4MS15).

Most of the SEN teachers in this study approached the intrinsic rewards of PT from an emotional-religious perspective. One gave the example of calling upon a peer tutor and saying, “I need your help, help your colleague and ask the reward from Allah, consider it as a charity work, and you will see how Allah will reward you either now or later on” (S2ST6). Devotion to Allah was the primary motivation for approximately half of the students working as peer tutors. This position can be seen in statements like, “I want to help my friend because I want to receive rewards from Allah” (S4MS17) and “the aim is to receive satisfaction from Allah, I want Allah to be happy to see me helping my friends” (S3MS34). Given the omnipresence of Islam in Saudi life, including the whole education system, this is a reasonable association. All schools in Saudi Arabia follow the precepts of Islam and thus encourage students to be good Muslims, who are closer to Allah. This is the purest form of intrinsic reward in Saudi education.

5.3 Gains and losses of PT

This section reports on the perceived gains and losses of PT from the perspectives of teachers and students (tutors and tutees). The findings are discussed in terms of the effectiveness of PT in improving the learning, academic performance, motivation and participation; as well as building social connections, fostering inclusion, enhancing confidence and improving self-esteem among SpLD students. Although it is not directly relevant to the specific aims of this research, gains for tutors were also examined in this section. Furthermore, the perceived losses of PT in terms of the fostering inclusion and supporting the socio-emotional development among SpLD students were also discussed in this section.

5.3.1 Gains of PT

5.3.1.1 Academic development

This study found that most participants (SEN teachers, SEN supervisors and students) perceived PT as an effective way to support learning for SpLD students, by enhancing performance, increasing achievement, improving motivation and increasing their participation. The literature supports these findings, asserting that PT helps students with SEN to develop in many ways. These areas include writing skills (Grünke, Janning and Sperling, 2016; Hughes and Fredrick, 2006), reading performance (Wexler et al., 2015; Dufrene et al., 2010), mathematics (Jo, 2015; Tsuei, 2014), student engagement (McDonnell et al., 2011; Arieno, 2007; Herring-Harrison, Garder and Lovelace, 2007), and better attitudes towards school and learning (Saleh and Ameen, 2003; Nugent, 2001; Franca et al., 1990).

5.3.1.1.1 Learning and academic performance

Many perspectives have been used to explain the success of PT (Thompson, 2011). For instance, it has been argued that these programmes are effective for supporting learning and meeting academic needs because they provide more opportunities for tutees to interact with learning material in the classroom than other students (Karagiannakis, 2008; Spencer, 2006). Others argued that the benefits arise from the relationship between the tutor and tutee, rather than additional instruction (Thompson, 2011; Arieno, 2007). The current study found that the individualised nature of PT and the close relationships between peers both contributed to the effectiveness of PT, especially in comparison to larger classes (Othman, 1997). One-to-one assistance can give tutees more reinforcement and more exposure to educational materials, which is especially valuable for students with SEN (Kotsopoulos, 2008).

Other reasons for the academic success of PT were the friendly atmosphere and closeness between the student pairs. This makes students more comfortable asking for clarification, thereby improving learning outcomes (Graesser and Person, 1994). Evidence was found for this position in the current study: “SpLD students feel more comfortable asking their friends, they are sometimes afraid to ask their teachers, they hesitate to say ‘I do not understand’” (S4ST5). In other words, PT programmes were perceived as effective because their learning environment is distinct from the traditional teaching environment (SS6). For instance, the authority of teacher within traditional teaching environments can create a psychological barrier for learners that does not exist in PT (Othman, 1997). However, the ability of PT to meet learning outcomes is highly dependent on positive and collaborative relationships between tutors and tutees (Roseth, Johnson and Johnson, 2008). This is true of many disciplines, such as counselling, where positive outcomes are attributable to the quality of the pair relationship (Norcross, 2002). Investigations into the relationship between adult tutors and young tutees found positive correlations between the quality of relationships and the performance of tutees (Heath et al., 2004, as cited in Kotsopoulos, 2008).

Another possible advantage of PT is that material is more likely to be delivered in simple, comprehensible terms, perhaps due to the close communicative distance between the tutor and the tutee (Othman, 1997). As both parties are likely to be the same age, the tutor may have insights into the situation, modes of communication, and learner difficulties that are not apparent to an adult teacher (Karagiannakis, 2008). As tutors and tutees share the same peer-language, they may also be better able to present content in a way that suits the cognitive framework of the student (Hamm, 2011; Cho and MacArthur, 2010). Most SpLD students were found to hold similar views, asserting that they understand from their peer tutors more than the classroom

teachers because their tutors used “different and simple methods” and gave them clearer examples “not like those that are written in the book” (S2Ss8).

5.3.1.1.2 Participation and motivation

There is some evidence to suggest that the opportunity for SpLD students to imitate their academically successful classmates can increase motivation and participation in the classroom. This study found that tutoring helped SpLD students to “leave bad gangs who were lazy and just playing [...] and had a negative impact on students’ motivation and their attitudes towards school”, encouraging them to instead “be like their friends who care for grades, work hard and respect their teachers” (S6ST2). Fulk and King (2001) support this position, arguing that PT can help students to improve their academic performance by modelling the behaviour of their tutors, in terms of study habits or questioning techniques. This modelling is likely to be more effective with a tutor than with a teacher, because of the high degree of similarity and closeness between the students, as well as the absence of authority, which tends to correlate in more effective modelling (Topping, 1996). The absence of authority and the non-competitive nature of PT interactions can also foster intrinsic motivation among students (Roseth, Johnson and Johnson, 2008). This can be achieved by ensuring that students like their partners and increasing learner autonomy, which increases their engagement in choosing learning activities and therefore increases the enjoyment of the overall experience (Zeneli, 2015).

The individualised nature of PT was also shown to increase the opportunities for response, thereby encourage more active engagement among students during the lesson (Bowman-Perrott, Greenwood and Tapia, 2007; Hoff and Robinson, 2002). This supports the findings of McMaster, Fuchs and Fuchs (2007), who stated that teacher-centered instructions is problematic for many students, particularly those with disabilities, due to the lack of equal

opportunities to respond. Recognition of this challenge suggests that educators must actively seek ways to give children with SpLD more opportunities to participate and respond through the use of strategies like PT, which encourage greater classroom engagement (Harper et al., 1999).

5.3.1.2 Socio-emotional development

The findings of this study showed that the majority of teachers and some students, including both tutors and tutees, perceived PT as a potentially effective way to support the socio-emotional development of SpLD students. In particular, this approach was believed to foster inclusion and help SpLD students to expand their friendships. These findings support previous studies that demonstrated that the relationships built between mainstream students (tutors) and SEN students (tutees) can have a positive impact on attitudes towards disabilities, leading to increased social acceptance (Garrote, Dessemontet and Opitz, 2017; Copeland et al., 2004). The study also revealed that PT contributed to increased confidence and self-esteem among SpLD students. Other researchers have also asserted that the increasing opportunities for practice during PT sessions can help students to gain confidence in their abilities and develop their self-esteem (Algozzine et al., 2009; Nugent, 2001). The current study also showed that PT fostered a sense of belonging and had emotional-religious gains for tutors.

5.3.1.2.1 Building social connections and fostering inclusion

Most SEN teachers and supervisors, as well as some students, agreed that PT assisted the development of social skills, helping to form new friendships, as well as improving communication skills (SS4). “SpLD students were enclosed within themselves, but now I can hear new names [...] now they are talking and listening to other students” (S4ST5). There is a great deal of support for the assertion that PT enables students with disabilities to learn age

appropriate social skills (Carter et al., 2013) widen their social networks (Street et al., 2009), and develop collaborative skills, like discussing, questioning, and disagreeing constructively (Cowley, 2013; Johnson and Johnson, 1992). These improved lines of communication also make student-to-student instruction an effective alternative to traditional pedagogy (Street et al., 2009). Eskay et al. (2012) highlighted the importance of relationships between peers, showing the potential for PT to provide opportunities for structured social skill development, leading to a reduction in anti-social behaviour.

Furthermore, all of the SEN teachers, the majority of SEN supervisors and some students agreed with the proposition that PT supports inclusion, noting the integration of SpLD students into mainstream groups. “They meet them [mainstream students], and talk with them during break time” (S5ST9). The inclusion of SpLD students may have increased as a result of the improved communication skills, confidence and self-esteem that arose from their participation in PT. Indeed, tutees were commonly more comfortable interacting in their regular classes after developing in PT sessions (Worley and Naresh, 2014). The lack of judgement in the PT environment has been shown to lead students to freely admit difficulties and ask questions, recognising that failure is a natural aspect of the learning process (Worley and Naresh, 2014). PT can also foster inclusion for autistic students by minimising their disruptive off-task behaviours (McCurdy and Cole, 2014) and creating positive and nurturing environment for growth (Hunter, 2005). When students move through middle and high school, they tend to avoid adult supervision, with peer relationships becoming more influential during adolescence (Carter et al., 2013). However, students with disabilities may experience difficulty in meeting and befriending others, due to the lack of communication skills, scarcity of inclusive opportunities, and the dominant role that adults play in their lives (Carter and Hughes, 2013; Laushey and

Heflin, 2000). This means that PT often provides ample opportunities for students with disabilities to experience appropriate social interactions (Laushey and Heflin, 2000), while those without disabilities may become more aware of disabilities and the challenges facing their peers, making the school culture more positive towards diversity and individual differences (Copeland et al., 2004). This fact encouraged typically developing students to interact with their disabled peers in this study. Approximately half of the SEN teachers asserted that PT has improved attitudes towards SpLD students, with some mainstream students being keen to help SpLD students. One teacher said that, “they [mainstream students] came to me and said, ‘I swear I will let her complete all the homework and I am responsible for her’” (S5ST7). Additionally, peer tutors said that they benefited from participating in PT, because it allowed them make friends with students with disabilities. On this topic, one mainstream student said that, “PT is a friendship more than teaching. When I help her [SpLD student], I treat her as a friend not as a learner and a teacher” (S2MS9). This supports the argument that PT can improve the peer culture relationship in a school, increasing positive cooperation between students (Klavina et al., 2014). This can establish a CoP, characterised by sharing and collaboration (Thompson, 2011), as well as by valuable interactions between friends (Foster-Harrison, 1997). A sense of community is invaluable to schools, reducing absenteeism and maintaining a healthy learning environment (Thompson, 2011). In this sense, PT supports ethics and morality, thereby opposing discrimination instead of serving purely instrumental functions.

5.3.1.2.2 Confidence and self-esteem

The majority of the SEN teachers and supervisors stated that PT was an effective way to improve the confidence of SpLD students, largely due to

increased feelings of self-worth (SS4) and the tailored support provided by peer tutors (S5ST9). This was particularly pronounced among SpLD students who did not receive sufficient care at home. Three SEN teachers asserted that the increased confidence levels of SpLD students manifested in improved communication skills, higher levels of engagement in class activities, and more interaction and support between students with SEN. The effectiveness of PT in improving confidence was also recognised by more than half of the mainstream students, who explicitly referred to the benefits of praising SpLD students and giving them opportunities to speak or participate. Finally, the majority of SpLD students reported that they had a better understanding of subjects due to PT, making them feel more confident, communicative and involved in classroom activities. These responses support the findings of earlier studies (e.g. Worley and Naresh, 2014).

Furthermore, there was broad agreement among SEN teachers and SEN supervisors that PT helped SpLD students to improve their self-esteem, because of opportunities to become proud of their work and enjoy close collaboration with someone who understood their difficulties. A small number of students confirmed that tutoring provided an avenue for empathic sharing of advice and solutions. These findings support the work of Darrow et al. (2009) and Rae and Nugent (2001), which show that PT provides emotional support and promotes the adoption of positive self-concepts.

The enhancement of emotional characteristics through tutoring is supported by Self-Determination Theory (Zeneli, 2015), which attributes interactions between peers as a major source of emotional enhancement (Ryan and Deci, 2000). This theory suggests that tutoring is effective because the behaviour of students is not controlled and non-competitive, which fosters calmness and free will (Zeneli, 2015). This also suggests that one reason several students do not enjoy learning is due to the central, authoritative figure of the teacher (Ryan and Deci, 2000). The non-competitive environment of tutoring can

facilitate the growth of positive relationships, in which tutees feel comfortable asking for help or receiving positive feedback about their classroom behaviour or academic performance, in turn improving their self-esteem (Arieno, 2007).

5.3.1.2.3 Improving a sense of belonging and practicing religious principles

The focus of PT is on helping SpLD students. However, the findings of this study showed that the method might also provide emotional benefits for peer tutors. For example, some seemed to benefit from feeling appreciated and the sense of helping. “I love to help my friend [...] it does consume some time, but not that much. I do not feel upset because I love to help others” (S2MS7) (S4MS15). Furthermore, improving their sense of belonging and contributing also helped to decrease levels of absenteeism: “they started to have the feeling that they must come to school because their colleagues need them” (S2ST6). These findings are in line with the literature, which stated that students who tutor their peers tend to feel a greater sense of belonging than those who do not (Nazzal, 2002; Foster-Harrison, 1997). However, some students may participate as tutors because they enjoy the status of being a tutor (Fitz-Gibbon, 1990), or seek a deeper understanding of the role of teachers (Robinson, Schofield and Steers-Wentzell, 2005). In addition, while many tutors may feel anxious about their abilities to understand a subject well enough to help their colleagues (Fitz-Gibbon, 1990), the act of giving them responsibility has an important motivational and developmental effect on the tutor (Zeneli, 2015).

The emotional-religious aspect of PT seemed to be inherently motivating. Almost half of the mainstream students explained that they participated in order to receive love, satisfaction and rewards from Allah. This was evidenced by statements like, “the aim is to receive satisfaction from Allah, I

want Allah to be happy to see me helping my friends” (S3MS34). The primary aim of all Muslims is the worship of Allah. Altruism is a central principle of Islam, with specific statements to this effect in both the Qur’an and the Hadith, and so caring for others is as valid a form of worship as are rituals and prayer. This means that tutoring offered students an indirect or implicit avenue to meet their emotional-religious needs, which they found inherently motivating.

5.3.2 Losses of PT

Overall, the perceptions were positive, with participants not identifying any negative impacts of PT. Nevertheless, certain issues were raised by many students regarding the role of PT in fostering inclusion and enhancing the socio-emotional development of SpLD students, which may be construed as being associated with the negative approaches to PT. Most SEN teachers and some students agreed that PT supports the socio-emotional development and inclusion of SpLD students. However, many students stated that PT had negligible or no effect in this area. Some mainstream students argued that tutoring would not improve the social skills of SpLD students, as they were “shy... [and] have a fear of social relationships” (S2MS9). Other mainstream students and SpLD students stated that they had not observed social and inclusion development, because the students already had a social network. Additionally, both mainstream (four) and SpLD students (sixteen) claimed that PT was not effective in overcoming negative perceptions and communication difficulties. “I do not directly communicate with anyone [...] after Huda [peer tutor] sat with me, other students started to come, they came to Huda not me because maybe I did not communicate with them, I think it is because of me not them” (S1Ss25). In fact, six SpLD students in this study stated that PT “mainly focused on studying” (S2Ss6) and so participation had not affected their emotional development. This position was supported by

almost half of the mainstream students, who stated that they did not offer support or express interest regarding the emotional state of their tutees. Half of the SpLD students confessed that they would not want to bother their peers by complaining, saying, “she [peer tutor] did not help me because I do not tell her about my problems, I do not want to bother her, I keep everything in my heart” (S3Ss35). Four SpLD students even confessed that their peer tutors were only colleagues, and so could not affect them emotionally (S6Ss3). This suggests that, prior to the commencement of PT activities, students should be chosen based on strong relationships, or a willingness to establish relationships before beginning. Although some mainstream students claimed that working with friends could be distracting, the majority of SpLD students preferred the idea of this option, believing that it would make them more comfortable and therefore more inclined to ask questions. Carter et al. (2015) support this position, advising that peer tutors should be selected from those students who already interact with disabled individuals.

The perceived non-effectiveness of PT in terms of socio-emotional support could be related to the lack of awareness among students (both tutors and tutees) regarding the objectives of implementing PT. Some SEN teachers stated that they had implemented a PT programme to fulfil socio-emotional aims, such as improving student confidence, fostering inclusion, and ensuring psychological and emotional support. In contrast, most students felt that the principle, or even exclusive, aim of the programme was to meet academic aims. Very few students agreed that PT would achieve the socio-emotional aims, volunteering these outcomes in response to questioning about the possible reasons for PT. This narrow understanding of the function and possible outcomes of PT could be a result of limited systematic planning and collaboration between students and teachers. It could also be attributed to misconceptions about this approach, as noted in numerous studies. For example, Bowman-Perrott et al. (2016) define PT as “an instructional strategy

that allows students to help one another learn content material through the repetition of key concepts” (p.359). This definition narrows the scope of PT, associating it with memorisation and academic development. This limited understanding of PT permeates the literature, which is reflected in a focus on goals and mechanisms to differentiate the various forms of PT, including peer mentoring, peer assisted learning strategies, peer support and peer coaching. For example, experts generally argued that mentoring differs from tutoring because of its focus on the development of personal skills and relationships (Johnson, 2014; Colvin and Ashman, 2010; Outhred and Chester, 2010).

This diversity of opinion in this field may be partially explained by the significant development that has taken place in PT literature, although most agree that these practices benefit students in both academic and socio-emotional terms (Blanch et al., 2013; Topping, 2005). A number of studies have implemented PT in the fulfilment of socio-emotional aims. These include the reduction of anti-social behaviour (Eskay et al., 2012; Sutherland and Snyder, 2007); teaching social skills and anger control (Wehby et al., 2003); building confidence (Hughes and Fredrick, 2006); increasing social interaction (Petursdottir et al., 2007; Xu, Gelfer and Perkins, 2005; Sideridis et al., 1997); changing attitudes (Hunsaker, 2014); and fostering inclusion (Garrote, Dessemontet and Opitz, 2017; Klavina et al., 2014; Bond and Castagner, 2006). Given the numerous valid reasons to implement PT programmes, it is important to understand the available options and intended outcomes (Korner and Hopf, 2014). In essence, tutors should also be properly informed and trained in accordance with the goals of the programme and the tutee (Villareal, 2013).

This illustrates that perhaps the most important component in planning a PT programme is a set of clear objectives, as these inform all of the remaining decisions (Miller, 2005) and the organisational dimensions (Topping, 2005). Of the available outcomes possible for PT, it is essential to determine the

desired outcomes and expectations of stakeholders. Therefore, before commencing a tutoring programme, teachers should create objectives for the end of the course that can be easily measured (Cervantes et al., 2013), which then guide and ensure consistency in the interactions between the tutor and tutee. Clear goals (Hott, Walker and Sahni, 2007) and effective evaluations (Hunter, 2005) are essential in assessing the effectiveness of a PT course and optimising the outcomes.

In summary, the objectives of individual PT sessions, such as helping SpLD students to express their feeling, reducing anti-social behaviour and supporting them to identify their strengths, all help to fulfil the overall aims of PT. These aims then contribute to the PT activity outcomes, such as fostering inclusion and improving self-esteem among SpLD students. In this context, one of the main contradictions identified in this study concerned the different interpretations of PT among the educational community and among the participants, particularly between teachers and students, regarding the aims and outcomes of PT. The presence of different 'voices' is a major challenge to the implementation of new systems (Engeström, 2009), such as PT. This is because it causes a contradiction between what must be done (supporting academic and socio-emotional development among SpLD students as stated by some SEN teachers) and what is being done (focusing on the academic development of SpLD students) (Larripa and Erausquin, 2010). This could obscure the overall outcomes of the activity system. Therefore, the successful implementation of a PT programme, in which students work harmoniously with their teacher to achieve shared aims, requires all parties to understand the objectives of the programme and even participate in goal setting. This can also help students to become aware and take an active role in their own learning. Teachers can, and arguably should, check that students understand a topic and reflect on PT activities. This could

redefine their idea about PT and reinforce the learning undertaken during the session.

5.4 Challenges in Implementing Peer Tutoring

This section reports on the barriers that hinder the implementation of PT in the selected schools in Saudi Arabia. Key challenges were the lack of time and excessive teacher workload. These were exacerbated by poor training opportunities provided to teachers and student tutors, in addition to the lack of space and the limited availability of physical and human resources, such as educational technology or SEN support staff. Limited collaboration between SEN teachers, SEN supervisors and school staff may have also adversely affected the collaboration between students and added pressure to teachers when implementing PT. The remaining issues discussed in this section are the poor level of policy support and the notion of policy borrowing.

5.4.1 The lack of training among students and SEN teachers

In order to ensure that the essential foundation required to enhance teaching exists (Holecek, 2012), the students participating in tutoring programmes must receive appropriate training and preparation (Nath and Ross, 2001). However, SEN teachers in this study only demonstrated their awareness of the value of providing training to tutors. This is in line with the majority of existing PT studies, which mainly focus on discussions of the benefits that trained tutors can bring to PT projects (e.g. Villareal, 2013; Schileyer, 2005; Sheldon, 2001). Nevertheless, there is evidence to suggest that tutees should also receive training, in order to improve their learning outcomes. This can include asking for clarification, not only to ensure correct understanding, but also because these questions can foster collaborative dialogues (Duran and Monereo, 2005). Tutees can even receive training in how to support tutors,

such as by encouraging them to reflect on their understanding and prior knowledge (Roscoe and Chi, 2004).

Trained tutors can improve PT practice through longer tutoring sessions (Fuchs et al., 1994) and the use of teaching techniques that are effective in the development of students with disabilities (Barron and Foot, 1991), such as the provision of immediate feedback and more opportunities to respond (Lingo, 2014; Miller, 2005). Training can also raise disability awareness (Cervantes et al., 2013), by providing information to tutors about types of disabilities and corresponding difficulties that their tutees are likely to encounter (Houston-Wilson et al., 1997). However, despite the broad consensus among SEN teachers about the importance of training peer tutors the findings indicated that training was largely inadequate. This was exacerbated by inadequate knowledge of teachers regarding peer tutor training criteria. Their approach was limited to the function and meaning of PT, the provision of simple teaching strategies and attitudes, such as the need for patience, and building good relationships between students. Due to a belief that students can teach from instinct or experience, one third of the SEN teachers did not provide any level of training for peer tutors: “they come across this strategy in the classroom... They have the background in implementing this strategy, but have few opportunities to practice” (S5ST7). Overall, the SEN teachers displayed poor understanding of the key skills used in PT, including assessment of tutee knowledge (Brewer, Reid and Rhine, 2003; Sheldon, 2001), how to communicate and reinforce learning (Houston-Wilson et al., 1997), checking understanding (Brewer, Reid and Rhine, 2003), and giving effective feedback (Carter et al., 2005).

The lack of knowledge among SEN teachers regarding the skills required by peer tutors during their preparation for peer support was highlighted as a major barrier to PT. This poor understanding was attributed to insufficient training, with a correspondingly limited understanding of training aims

(Almulla, 2018). All SEN teachers stated that their implementation of PT was based on personal knowledge, gained from research, consultation or personal experience. The teachers confessed that their formal training lasted only one day; all wished to undertake more training courses on special needs and PT. Teachers need to be properly trained and informed about effective teaching and inclusive practices (Hughes and Fredrick, 2006), as all new strategies may suffer from limited pedagogical knowledge. Therefore, a lack of knowledge can prevent a strategy from ever being properly understood or implemented (Thompson, 2011). Nevertheless, the pre-service training programmes on special education for mainstream teachers in Saudi Arabia are very limited, meaning that they are commonly unprepared for the challenges of inclusive education. This is exacerbated by limited in-service training programmes about teaching and inclusive practices for SEN teachers in Saudi Arabia, which constitutes a barrier to student support in mainstream settings (Aldabas, 2015).

In contrast to the teachers in this study, most SEN supervisors asserted that training was adequate and appropriate: “SEN teachers are fully trained” (SS4) and they should not “wait until their supervisors come to teach them how to implement the method in detail” (SS1), because adults have fully developed problem-solving skills (SS4). As a consequence, one SEN supervisor stated that the teachers should be blamed for any failure to implement PT. This may be an example of how culture adversely affects training (WHO, 2011), with Saudi culture encouraging power inequality in the relationship between a supervisor and a new specialist teacher, making systemic changes to training or programmes difficult.

5.4.2 The lack of time and teacher workload

A sizeable proportion of the study participants (over half of the SEN supervisors and students, plus all SEN teachers) perceived time limitations as a barrier to the successful implementation of PT, in large part because of the intensity and scheduling of lessons. These challenges have been well recognised in the context of middle schools in Saudi Arabia (Alabdulkarim and Alshehri, 2014; Abdulaziz, 2005; Alkathiri and Nashwan, 1993) and found to hinder the implementation of student-centered approaches in the classrooms. Although scheduling PT sessions during the school day can be difficult, there is a degree of flexibility in implementation during regular class contact time, outside class (Topping, 2005), before or after school (Sheldon, 2001), or a combination of the above. In all of the schools observed in this study PT was primarily conducted during free classes (when the classroom teacher was not present), at the end of each class (when the lesson finished early), between classes, or during break time. Students were solely responsible for finding available time, meaning that sessions were implemented randomly, with durations of 5-30 minutes. Both mainstream and SpLD students expressed dissatisfaction with this situation, because of their difficulties in finding enough time to engage with each topic properly. The SEN staff acknowledged this problem, noting that it was exacerbated by scheduling issues.

SEN teachers recognised the potential advantages offered by PT programmes, although they complained that their duties made the training and supervision of students difficult. The increased workload required to implement PT effectively can be extremely time consuming (Thompson, 2011). This can result in teachers become unwilling to support new programmes (Gersten and Woodward, 1990). It should be noted that there is a shortage of studies into the time-consuming nature of PT programmes (Hamm, 2011), possibly given

the wide range of variables, such as the number of students, physical facilities and the level of collaboration required. For example, time is an organisational dimension that must be considered during programme planning (Topping, 2005), because the time available for tutoring sessions could be affected by limited collaboration between SEN teachers and participating students (Carter et al., 2013), although well-structured programmes can be implemented without time constraints (Thompson, 2011).

5.4.3 The lack of space and limited resources (physical and human)

The physical environment and available resources in the participating schools were perceived as a barrier to effective PT by almost all SEN teachers, and half of the SEN supervisors and students. Given the importance of space in PT (Miller, 2005), mainstream classes were largely unsuitable. Classes were generally small and overcrowded, with students facing the board and sometimes not next to their tutor partner, which adversely affected the efficacy of tutoring. Limited physical space can restrict interactions and the exchange of messages (Yip, 2004), thereby limiting information, feedback, and teacher monitoring and evaluation processes (Sheldon, 2001). The main feature that distinguishes PT from other incidental practices is the quality of dialogue between students (Thurston et al., 2007), so large, noisy classes could adversely affect the quality of these programmes. The inability to work in quiet places might also be distracting (Sheldon, 2001), which was supported by the statements of both mainstream and SpLD students in the current research.

Observations revealed that some resource rooms did not have sufficient equipment to support SpLD students, with many having been decorated and furnished by teachers at their own expense. A number of the standard devices for some resource rooms were missing or not activated by teachers, including

computers, printers and projectors (MoE, 2011a). All SEN teachers added that they had designed and paid for educational materials, rather than being supplied by the MoE. This contravenes pedagogical theory and practice, such as AT, which highlights the ways in which tools affect the achievement of human goals. In the educational context, it is recognised that the planning of PT should involve due consideration of appropriate materials (Villareal, 2013). These materials guide the interaction between students (Topping, 1996), helping them to 'scaffold' learning within the ZPDs of their peers (Zeneli, 2015) and informing the process of systematic instruction (Sheldon, 2001). Providing well-designed, personalised educational aids can facilitate learning (Flores and Duran, 2016), although tutors should also learn how to present material more effectively if they are involved in the design process (De Lisi and Golbeck, 1999).

During observations, it was apparent that teachers supplied tutors with basic learning aids, like books and worksheets. The majority of SEN teachers and students felt that the lack of educational aids or teaching materials did not affect PT outcomes, because they were deemed unnecessary. These perceptions may be due to a lack of understanding about the potential of these materials or their integration into class activities. There was an observed tendency of middle school teachers to use traditional methods, predicated on the knowledge-transferral paradigm. However, it is essential to tackle issues regarding equipment and education aids immediately by approaching headteachers, who are responsible for equipment maintenance and requisition, except when teachers lack the inclination to utilise the provided resources.

At the present time, schools in Saudi Arabia do not employ TAs. Three of nine SEN teachers recommended the introduction of TAs to address the problems that arise from large classes, especially in terms of the difficulty paying attention to SpLD, slow and weak students. One teacher explained that

TAs “can be a supporter for mainstream teachers [...] and can help to observe the progress of PT activities in classrooms” (S6ST2). Fostering inclusion requires responsibility to be shared for better education provision (Blatchford, Russell and Webster, 2012). TAs work alongside SEN teachers to offer support in inclusive classrooms in many western countries (Avramidis and Norwich, 2002), including the US (Giangreco, Doyle and Suter, 2013) and the UK (Radford et al., 2015). Overall, TAs have been shown to reduce job pressures and the workload of classroom teachers (Lee, 2002).

The introduction of a TA to a classroom does not necessarily replace peer tutors (Fougner, 2012). Instead, TAs can support and enable PT programmes, helping to supervise and instruct tutors, and update teachers about the ongoing progress of a programme (Fuchs et al., 1997). However, when TAs are improperly prepared and trained, their presence can impair interactions and make questions less effective (Giangreco, Doyle and Suter, 2013; Radford, Blatchford and Webster, 2011), potentially harming student performance (Blatchford, Russell and Webster, 2012). Policies should therefore clarify TA interactions with students, to ensure they complement peer tutor interaction.

Based on socio-cultural theory, Radford et al. (2015) proposed three roles for TAs, to lessen the delegation of responsibility to peer tutors. The first role is ‘repair’, which means that TAs should assist students when they cannot answer a question or provide an incorrect response (Macbeth, 2004). In this situation, a TA should encourage the student to repair their error or, if they cannot, the TA should correct the answer. This requires the assistant to be able to identify when peer tutors are experiencing difficulty and to provide appropriate support, such as by the use of prompt cards. The second role is ‘support’, which primarily aims to keep learners positive, focused and relaxed during classroom tasks (Radford et al., 2015). Whenever a peer tutor becomes demotivated during a PT session, TAs should provide guidance and

encouragement. The third role is 'heuristic', which describes the process of empowering students by preparing them with the skills required to devise and employ their own strategies to solve problems (Holton and Clarke, 2006). This suggests that TAs can support tutors by modelling suitable problem-solving techniques or prompt students by using scaffolding questions, like 'what technique could you use to answer this question?'. They can also provide encouragement to managing reliance on tutor support, empowering participants to develop problem-solving techniques and support mutual learning.

Despite the potential benefits of TAs, there are certain challenges inherent to the Saudi educational context, such as the large class sizes, unequal status of SEN teachers. One SEN teacher warned that mobility limitations associated with large number of students and the small physical spaces for classes might cause TAs to be a less or unsuccessful experience (S1ST3). Mainstream teachers might also reject the presence of a TA, as observed in their resistance to the participation of SEN teachers in classroom support roles for SpLD students. The majority of SEN teachers reported that mainstream teachers rejected co-teaching strategies (S6ST1), which made it an "unsuccessful experience" (S6ST2). This indicated that TAs have the potential to be a valuable human resource and a benefit to PT programmes. However, their role requires clarity and an explicit acknowledgement of factors, such as the attitudes of mainstream teachers and the challenges of the classroom environment.

Approximately half of the SEN teachers expressed a desire for the recruitment of more SEN teachers, arguing that it would partially alleviate work pressure. This, in turn, would enable them to train and supervise peer tutors, and complete paperwork. However, SEN supervisors generally felt that having more teachers would not improve the implementation of PT. "I do not see that increasing the number of SEN teachers in school will help or will add

something new” (SS1). This position was based on the belief that the main challenge facing PT is the lack of support that mainstream teachers provide regarding scheduling difficulties rather than the lack of SEN teachers or workload. Hence, these issues must be addressed prior to recruiting more SEN teachers. The problem of limited collaboration is discussed below.

5.4.4 Lack of collaboration between SEN teachers and school staff

Collaboration between administrators and PT facilitators, as well as between PT facilitators and other school staff, such as school counsellors, is essential for the success of this approach (McDonnell et al., 2011; Hunter, 2005). However, SEN teachers were found to suffer from a lack of effective collaboration in their duties and responsibilities. Observations also showed that some mainstream teachers even prevented students from talking under any circumstances, perhaps to minimise noise and encourage students to focus. This led to many students performing their PT roles during free classes instead, when their teachers were absent.

Increasing emphasis is being placed on the importance of collaboration between SEN teachers and mainstream teachers to facilitate inclusive practices in a wide range of contexts (Khairuddin, Dally and Foggett, 2016; Pülschen and Pülschen, 2015; Hernandez, 2013). For example, mainstream teachers can support PT practice by pooling their resources to identify potential peers for students with SEN, as well as by designing tutoring plans together (Carter et al., 2013), facilitating student cooperation (Carter et al., 2015), monitoring student interaction, and offering feedback (Carter et al., 2005). However, half of the SEN teachers noted the continued lack of collaboration with mainstream teachers as a barrier to the implementation of PT. Mainstream teachers often refused to change their class management procedures, to allow peers to sit next to each other, or to supervise PT. There

also seemed to be a lack of willingness to facilitate PT through the provision of rewards or by cooperating to overcome scheduling issues.

The lack of collaboration between mainstream and SEN teachers could be attributed to a number of factors. Perhaps most importantly, the negative attitudes and the social stigma towards students with disabilities, with some teachers saying, “all students who enter this room [learning resource room] are stupid” (S3ST8). SEN teachers noted that problems only occurred with mainstream teachers who do not recognise the importance of the SpLD programme and who were extremely resistant to learning about SEN or accommodating SEN teachers (S3ST8) (S5ST7).

The attitudes of mainstream teachers can either facilitate or hinder the implementation of inclusion policies and practices (Avramidis and Norwich, 2002). This is because teachers’ behaviour can be profoundly influenced by their beliefs and hence the positive outcomes of inclusion into mainstream classroom might be hindered by teachers who hold negative attitudes towards this goal (Woolfson and Brady, 2009). For instance, those who perceive SEN students as lacking the skills needed to learn in a mainstream classroom might be less willing to give attention or provide support to these students than their typically developing peers. Therefore, the enhancement of positive attitudes among mainstream teachers is vital in ensuring the integration of SEN students into mainstream classes (Bradshaw and Mundia, 2006; Forlin, Douglas and Hattie, 1996). Studies have shown that positive beliefs and attitudes correlate to the experience, knowledge and training of teachers in SEN (e.g. Dunn et al., 2016; Dupoux, Wolman and Estrada, 2005; Avramidis et al., 2000). Training can play a vital role in educating mainstream teachers about SEN students and providing them with the skills needed to meet the individual needs of those students in mainstream classrooms (Khairuddin, Dally and Foggett, 2016; Gaad and Khan, 2007). This position is supported by a number of studies conducted in the Saudi context, which identified a lack

of collaboration among SEN and mainstream teachers. This lack is considered to be one of the major obstacles hindering the inclusion of SEN students in Saudi Arabia, with studies suggesting that more training courses being organised to raise awareness among mainstream teachers regarding students with disabilities and the role of teachers in supporting them in mainstream classrooms (Abunayyan and Aljaloud, 2016; Alayed et al., 2011; Almarshedi, 2008).

The lack of collaboration can also be explained by power imbalance between SEN and mainstream teachers. While relatively few studies have compared the status or the power relationships between Saudi Arabian SEN teachers with their mainstream colleagues, this study showed that there was unequal status between teachers, in favour of mainstream teachers. This was especially apparent in terms of work mechanisms, such as diagnosing tests and teaching guidelines. Upon review, while mainstream teachers have clear work guidelines for each subject (e.g. the ‘Guide for Teaching Mathematics’) — which include teaching content, learning aims and assessment methods (MoE, 2011b) — little information is available on the work mechanisms for SEN teachers in the GSpLD (MoE, 2011a). For example, although official guidelines for SEN teachers require that the diagnosis of SpLD students focus on identifying their strengths and weaknesses, no information is provided regarding the appropriate exams or testing tools for this assessment (MoE, 2011a). As a result, there was a lack of consistent among SEN teachers in identifying SpLD students: in this study, some SEN teachers tested basic skills using level five diagnostic tests from the primary school stage, some designed new tests that were based on the middle school curriculum, and others used tests written by their colleagues. Having insufficient or inadequate tools can be problematic, leading to students being mislabelled and teachers being unable to diagnose student issues effectively (Al-hano, 2006). Accurate assessment and diagnosis of LD is essential for the design

and delivery of plans that meet their needs. The guide for SEN teachers also lacks clarity regarding teaching content. For instance, the guide states that SEN teachers are responsible for supporting SpLD students in Arabic and mathematics (p.8), then contradicts itself (p.19) by giving SEN teachers responsibility for the provision of support in all middle school subjects. This led to differences among the SEN teachers in this study concerning the support provided for SpLD students: some taught remedial primary skills, whereas others focused on the subjects that SpLD students were currently studying. Two SEN teachers argued that their role was to teach learning strategies that foster independent learning, such as note taking or concept maps, rather than focusing on middle school subjects. Another SEN teacher provided social and psychological support, rather than teaching academic skills, because “there is no correct structure for the SpLD programme at middle school stage” (S1ST3). The lack of clarity regarding the work mechanism for SEN teachers might negatively influence their status, by hindering mainstream teachers from properly understand the value of SpLD programmes in their school or preventing them from appreciating the importance of the role and responsibilities held by SEN teachers.

The power imbalance also appeared in this study regarding assessment procedures and teaching schedules. For example, one of the roles of mainstream teachers is to collaborate with SEN teachers in facilitating the use of assessment methods that are most suitable for the abilities of SpLD students (MoE, 2015). This could take the form of formative assessment to ensure that students have understood the lesson and to decrease the stress associated with assessment procedures (MoE, 2011a). Another option might be by facilitating exams by avoiding complicated questions that require more than one clear answer or providing extra time to think and write for students who have writing difficulties (MoE, 2011a). Nonetheless, mainstream teachers were not always to be complying with their roles and some even

refused to follow the suggestions of SEN teachers regarding the assessment of SpLD students (S3ST8) (S4ST5). Similarly, mainstream teachers are required to collaborate by allowing SpLD to enter the learning resources room, in accordance with the schedules designed by SEN teachers and approved by headteachers (MoE, 2014b, 2015). The official guidelines for SEN teachers who work in middle school (i.e. the GSpLD) states that each SEN teacher should be responsible for twelve SpLD students in each school (MoE, 2011a). Of these twelve, six students are a primary focus, meaning that they should receive support in three lessons per week, and six students are a subsidiary focus, requiring consultant services. However, the majority of SEN teachers expressed their frustration with the lack of fixed schedules for the provision of support to SpLD students. Two SEN teachers stated that, “our schedules are simulated, we do not have fixed schedules, and we do not have a specific time for us, we lack stability, we take students during free classes and when mainstream teachers collaborate with us” (S2ST6) (S5ST7). This study showed that these policies were often not translated in practice, as can be seen in the lack of official schedules for SEN teachers who were struggling to meet with their SpLD students. This seemed to adversely affect their status in their schools.

The lack of collaboration could be also attributed to the lack of CoP among SEN and mainstream teachers. In Saudi Arabia, SEN teachers are responsible for consultation with mainstream teachers on all matters relating to SpLD students, such as pedagogical approaches, exams and progress (MoE, 2011a). However, the findings indicated that mainstream and SEN teachers had different responsibilities, resources and teaching spaces within the educational structure because of educational policy and practice. While SEN teachers are required to provide assistance to students with disabilities according to the IEPs for each student, mainstream teachers are tasked with using uniform lesson plans to deliver classes that assist all students meet the

objectives of the national curriculum. SEN teachers were forbidden from teaching in regular or inclusive classrooms, confining themselves to the resource room. The combination of these factors created unfavourable conditions for collaboration between teachers, as found in this study. The separation between teacher training for SEN and mainstream teachers at the university level in Saudi Arabia might also make it more difficult to educate all staff about SEN, thereby complicating the process of changing attitudes about students with disabilities, limit understanding displayed by mainstream teachers about their role in supporting these students and in collaborating with SEN teachers.

Working in isolation can hinder the development of inclusion practice, as each group of teachers normally has limited capabilities. Therefore, teachers benefit from sharing their ideas and experiences with one another. According to Hadar and Brody (2010), “collaboration creates a culture in which further learning is stimulated and supported” (p.2). A CoP can foster this collaboration by allowing teachers to work and interact together, talk about their problems, exchange information and find solutions to enhance their professional growth (Lave and Wenger 1991). Interactions among professionals within a CoP can be an important force for changing attitudes or behaviours (*habitus*), because teachers will not only have opportunities to build knowledge or make sense of their actions through discussions, but may also be able to critically reflect on their pedagogical practices and challenge their assumptions, examine their teaching outcomes and make appropriate change (Ng and Tan, 2009). However, developing a CoP requires a strong relationship to be established among professionals who have similar interest in the given subject, share similar concerns in a particular domain (*field*) and work towards mutual benefits that encourage them to provide assistance and ideas to each other within a safe, open environment (Tseng and Kuo, 2014; Hadar and Brody, 2010; Wenger, McDermott and Snyder 2002).

Therefore, it is essential to link the philosophy of mainstream teaching with the notion of inclusion and to find ways to help mainstream teachers to understand that one of their main roles and responsibilities in the classroom is to give support to SEN students. This should be integrated into the university education and training of mainstream teachers. It is also worth considering the option of designing shared modules that raise the awareness of both pre-service mainstream and SEN teachers with respect to disabilities. Such courses could provide them with opportunities to engage in collaborative activities to discuss assessment procedures, pedagogical practices and different types of educational provisions that could be provided to SEN students. However, it is important to ensure that the goals of such programmes are congruent with the pedagogy, philosophy, and role of mainstream and SEN teachers, as this can help to encourage greater collaboration (Wade, Welch and Jensen, 1994). The provision of in-service training for mainstream and SEN teachers could also improve understanding and cooperation by giving educators more opportunities to learn and share ideas in collaborative environments within school settings (Leyser and Tappendorf, 2001). This approach was supported by Hernandez (2013), who demonstrated that collaboration among teacher groups is hindered by separation during training.

The findings also illustrated that most SEN teachers are unaware of the importance of collaborating with school counsellors, with interviewees stating, “I do not think that our school counsellor can add to the implementation of PT” (S5ST7). School counsellors are members of special education teams in Saudi inclusive education schools. Their responsibilities include the development of IEPs, the provision of consultation to parents and students with SEN, monitoring students’ academic progress, and collaborating with staff to ensure that the individual needs of students are met (MoE, 2014a). Their familiarity with the student body also enables

counsellors to recruit suitable peers without disabilities into PT programmes for students with SEN (Gaustad, 1993). After helping select and train students, counsellors can also facilitate the implementation of PT by monitoring and assessing the ongoing provision (Hunter, 2005; Sheldon, 2001). Studies have shown that when PT is supervised by school counsellors, tutors deliver reliable instruction that helps students to meet IEP outcomes (Odluyurt, Tekin-iftar and Ersoy, 2014).

In this study, only one SEN teacher was aware of the potentially valuable role of the school counsellor in lessening her workload but added:

Each time I have asked her about something she replied ‘I do not know, delay it for later’. Each time I asked her about the student and the problem she faced she said ‘I do not know’... I refer the students if they have a speech problem, but I do the referrals! And then I sign it from the school administration... these are her tasks! My task should be to refer a student to her [the school counsellor]... I feel that the students are affected by the delay. Even when I ask the teachers ‘do you see that she [the school counsellor] is doing her job? They said no’... unfortunately, we SEN teachers are suffering from these teamwork problems (S6ST2).

This conflict remained unresolved, due to a lack of support from the school administration.

Challenges were identified in terms of the lack of collaboration from school administrators (represented by headteachers). Two SEN teachers at two different schools expressed anger and resentment over their treatment by the school administration. The first SEN teacher had not been welcomed to her school or given a space to work. Her headteacher did not see the learning resource room as a “part of the school, she had not done anything about the

room for one year and did not bother to ask for a new SEN teacher during that time” (S5ST9). The second SEN teacher was also neglected by her school administration, who failed to notify her about changes in the school schedule. The headteacher also ignored conflicts with the mainstream teachers who refused to facilitate the exams for SpLD students and denied them permission to visit the learning resources room (S4ST5).

The attitude of the entire school plays an important role in the successful implementation and operation of inclusive practices (e.g. Moltó, 2003; Avramidis and Norwich, 2002). A negative school society can result in the exclusion of students with SEN (Samaha, 2007), and so educational systems should strive to remove barriers to participation and stress flexibility in order to maximise student integration (UNESCO, 2009). Headteachers can play an important role in enhancing positive attitudes, establishing an ethos of care and democracy, as well as providing sufficient evaluation, resources and support to SEN students (Gathumbi et al., 2015; Alothman, 2014; Lindqvist and Nilholm, 2013). They can also play a key leadership role by ensuring good communication among members of staff and all other stakeholders in education (school, home, the MoE) (AL-Kahtani, 2015). For instance, headteachers can facilitate meetings between SEN and mainstream teachers for the preparation of lesson plans and ideas sharing, thereby enhancing the learning experience of SEN students and their typically developing peers (Sanzo, Clayton and Sherman, 2011; Irvine et al., 2010).

In Saudi Arabia, the only requirement for headteachers in inclusive education is to have worked as teachers in general education. During their training to work in mainstream schools in Saudi Arabia, headteachers receive no information about inclusive education programmes for students with SEN (Al-Fahily, 2009), despite the importance of their role in their success (e.g. Winter, 2006; Reid, 2005). Without training and experience in the field of SEN, educational staff of all levels may be unable to meet the various

educational and social needs of the children in their care. Headteachers are expected to have sufficient knowledge about the needs of SEN students, SEN policies and pedagogical practices in order to determine how best to support students with disabilities in their schools and to support teachers in their implementation of various instructional practices (Sanzo, Clayton and Sherman, 2011). It has even been argued that headteachers can encourage teachers to develop and implement interventions to increase learning experiences among SEN students (DiPaola and Walther-Thomas, 2003; Embich, 2001).

5.4.5 The lack of support by SEN supervisors

Supervision can be defined as a collaborative relationship between educators (such as SEN supervisors) and teachers that seeks to foster professional growth among teachers, thereby improving the quality of their teaching and promote learning outcomes (Beach and Reinhartz, 2000). Supervisors are expected to play a number of roles in order to achieve the above aims. In Saudi Arabia, Article 32 of the RSEIP stipulates that the responsibilities of SEN supervisors include: participation in preparing educational schedules; identifying the objectives of the SEN programme and discussing them with the teachers; monitoring assessments for SEN students; checking the implementation of the instructions from the GASE and the MoE; continuously supervising the teachers; and holding periodic meetings to improve teacher performance (MoE, 2001).

Supervisors can play a vital role in encouraging teachers to implement teaching approaches, including PT, which activate the role of students. The teaching suggestions provided by supervisors tend to widely influence teachers' pedagogical practice (Scheeler, Ruhl and McAfee, 2004). This finding was supported by Malunda et al., (2016), who investigated the

influence of instructional supervision on teachers' pedagogical practices in Uganda. They found that advice from supervisors strongly influences teachers' performance and encourages the implement of various effective pedagogical practices to promote students' learning. Supervisor support can be achieved through classroom observations or reviewing teacher portfolios, enabling teacher performance and student participation to be monitored. These insights can be used to give feedback to teachers that improves their preparation and practice, thereby providing students with more opportunities to learn and improve their academic performance (Zepeda, 2010). Supervisors also have a role in reducing workload (such as paperwork) and providing sufficient resources for teachers (Aldawud, 2013), which can support the implementation of PT by giving teachers more time to train students, to prepare PT activities and to supervise students' interaction (S4ST5). This support could also provide educational resources (such as educational games) that can promote student interactions (S5MS37). In addition, supervisors can facilitate communications among teachers and other school staff, help to ensure the establishment of a shared vision and aims among school staff, and solve emergent problems facing teachers in their schools (Lashley and Boscardin, 2003; Pajak, 1990), all of which can promote the successful implementation of PT.

However, the results of the current study revealed that SEN supervisors often failed to provide clear communication or sufficient support to SEN teachers, particularly concerning the implementation of PT. Half of the SEN supervisors tended to encourage SEN teachers to solve their own problems, especially those relating to mainstream teachers, perhaps due to the belief that forced collaboration would destroy the relationship between these teacher groups. Some supervisors stated that their help was not essential for the implementation of PT, instead recommending that teachers "not wait for your supervisor to come to give you some guidelines [...]. Teachers can search for PT on Google" (SS1). A third of the SEN teachers expressed clear frustration

regarding the fact that they often have a much larger than intended role in the design and delivery of SEN programmes, including the implementation of PT, leading them to call for the shortage of SEN supervisors to be rectified (S5ST7), in the hope that they would receive more visits and support, especially with PT (S6ST2). They attributed infrequent visits to the work pressure facing supervisors, which the majority of SEN supervisors explained in terms of their responsibility for “administrative tasks and the large number of programmes [SpLD programmes]” (SS2).

Increasing the number of SEN supervisors might provide more support to SEN teachers (Albattal and Alqahtani, 2017). However, simple numbers might not completely solve the issue, given the apparent lack of understanding displayed by SEN supervisors regarding the importance of collaboration and support. It is therefore essential to focus on the preparation of SEN supervisors and to ensure that they are fully aware of their roles and responsibilities in the support of SEN teachers. According to Lashley and Boscardi (2003), the preparation of SEN supervisors is vital in successful inclusion. As a consequence, the preparation should not only provide SEN supervisors with the knowledge in special education services, but also increase their awareness of how to support SEN teachers by addressing issues related to instructional practices and collaboration with mainstream teachers. Bays (2001) adds that SEN supervisors should be prepared to provide emotional support to SEN teachers, helping them to resolve personal and professional conflicts. Hence, it is important to ease administrative the burden on SEN supervisors and empower them to fulfil their roles as required (Alabduljabbar and Altayyar, 2016). More importantly, it is important to develop a sense of community and shared responsibilities between SEN supervisors and headteachers, encouraging them to collaborate in the supervision of SEN services and ensure that the recommendations of SEN supervisors are implemented in schools (Bays, 2001; Swan, 1998).

5.4.6 Policy challenges and policy borrowing

According to most participating SEN teachers, the most serious challenge to the successful implementation of PT programmes was the current lack of policies and guidelines. The only official source of policy guidelines is the GSpLD. However, they are unclear and incomplete, with information on the provision for PT activities being limited to half a page of simple instructions. In order to achieve the best learning outcomes through PT, it is essential to have clear guidelines (e.g. Cervantes et al., 2013; Miller, 2005; Sheldon, 2001). These rules should cover issues like training, suitable activities, and quality monitoring processes (Iwata and Furmedge, 2016). Importantly, the majority of PT guidelines were borrowed from the international context, meaning that adaptation is required to ensure that they better suit the Saudi Arabia educational context.

In general, supervisors stated that SEN teachers should not rely on policies and guidelines, instead using the flexibility they have been given to acquire information and collaborate with their colleagues to find solutions. Many supervisors played little or no role in the implementation of PT. As a consequence, different groups and stakeholders had a different understanding of PT. One SEN supervisor explained the lack of guidelines and support by stating that “PT is not compulsory” and that it is only one of many available teaching methods that can be used to facilitate understanding among SpLD students (SS4). This position was supported by the design of the official evaluation form, which is the primary way in which supervisors assess teacher performance. This tool is utilised to check whether teachers are using different teaching strategies to enhance the learning experience of SpLD students, although no specific encouragement is given to the use of collaborative or student-centred approaches. Rather than acknowledging the lack of policy support, one SEN supervisor even blamed limited PT practices

on the failure of SEN teachers to develop their teaching habits or improve their own attitudes towards SpLD students (SS2). This suggests an individuated approach to resolving a systemic problem. However, the fact that education policy and practice in Saudi Arabia are strongly centralised means that change must begin at the government level, with instructions about the best teaching practices being sent (top down) from the MoE. Requiring individual teachers to overcome the difficulties posed by systemic barriers is not conducive to the creation of an open and supportive educational environment that fosters learning and inclusion.

Another issue that was raised by half of SEN teachers is the notion of policy borrowing. The teachers stated that most of the teaching material for SpLD students in their developmental workshops, particularly those explaining the implementation of PT, was borrowed from other countries. Indeed, SEN policies in Saudi Arabia have been heavily influenced by US policies, with the RSEPI having been heavily influenced by “the Education for all Handicapped Children Act (EHA) 1975 and Individual with Disabilities Education Act (IDEA) 1990” (Alquraini, 2011, p. 150). In attempting to integrate US educational policy into the Saudi education system, the GASE sought to raise special education provision in Saudi Arabia to international standards. This is potentially problematic, as the educational systems of these countries are often profoundly different from that of Saudi Arabia.

This approach of borrowing ‘best practice’ from foreign experts is common in policy making around the world (Raffe, 2011). This topic has also been widely discussed in comparative education studies which examine the applicability of policies taken from other context, such as the implementation of German education provision in the UK (Phillips and Ochs, 2004). The main motivation for borrowing policies seems to be the opportunity to learn from other’s experiences (Forestier and Crossley, 2015), to follow international

initiatives (Duke et al., 2016) and to keep pace with the growth of information and development of educational systems around the world (Forestier et al., 2016). The reasons for borrowing policies are diverse and complex, because they are “very much embedded in the context within which they exist” (Burdett and O’Donnell, 2016, p. 113). When done well, policy borrowing can offer numerous potential benefits, such as access to new ideas and pedagogies, increased global competitiveness (Durkheim, 1982), and the use of proven models to inform local development (Burdett and O’Donnell, 2016).

However, the transferral of successful policies from a certain country does not necessarily mean that they will work in another (Steiner-Khamsi, 2014). There are many possible reasons for this, including the inherent complexity of educational systems, the number of players involved, and the influence of socio-economic, cultural or political considerations (Burdett and O’Donnell, 2016). These issues can make the wholesale borrowing of educational policies ineffective, inapplicable or even dangerous (Forestier and Crossley, 2015; Raffe, 2011). In other words, the failure of borrowed policies can be attributed to a number of factors, such as individuals’ interpretations of these policies, negative attitudes, a lack of resources, the absence of expert consultants, and differences in educational goals and philosophy (Burdett and O’Donnell, 2016; Duke et al., 2016). In essence, this means that borrowing foreign policies might not lead to the same outcomes, especially if no evaluation is conducted regarding the context in which these policies are intended to be implemented (Tan and Chua, 2015). Raffe (2011) suggested that countries should benefit from others’ successful experiences by investigating the process of change, anticipating possible challenges and adapting ideas to the local context, rather than simply be copying policies. This process is called a policy learning approach and can be used to enrich policy analysis and development (Raffe, 2011). Rather than a wholesale

adoption of ‘best practices’, policy learning seeks to make informed decisions in the local context that are informed by the experiences of other countries. Giving the case of Hong Kong, as an example, a country which has managed to benefit from international experiences in the west to improve the quality of education, including changing the curriculum and reforming teaching strategies (Cheng, 2005). This was achieved by the extensive efforts by policymakers to consult local and international experts, as well as stakeholders (such as teachers and parents), in an effort to understand contextual differences and adapt the lessons to the specific Hong Kong context (Forestier et al., 2016; Forestier and Crossley, 2015). In other words, Hong Kong sought evidence for the policy change rather than evidence to support policy adaption. This illustrates that research conducted in other countries can provide useful insights and strategies for the development of educational policy. However, recommendations or globalised proposals must nevertheless be tailored to suit the specific requirements and challenges of the Saudi context (Mourshed, Chijoke and Barber, 2010).

Taking PT as an example, one reason for policymakers to introduce this approach to Saudi schools was the possibility of improving the quality of learning for SEN students and activate the role of students in the classroom, in compliance with the recent interest of the Saudi government (per the 2030 vision) (MoE, 2017). However, borrowed PT policies suffered from limited adaptability in the specific local context. Policymakers assumed the success of PT in the west could be attributed to education policy and therefore neglected numerous interrelated cultural, traditional and contextual factors that profoundly affect the success of policies (Burdett and O’Donnell, 2016). One of these factors were participants’ understanding and attitudes towards PT. In Saudi Arabia, the concept of PT was problematic, because participants did not have historical relationships with this approach, unlike other countries, such as the US and the UK, which had extensive literature on PT

and related approaches. It was also problematic because of the influence of the religious and cultural traditions in Saudi Arabia, which perceive teachers as the main source of information and learning, leading to continued stress being placed on the acquisition of knowledge through memorisation and repetition, rather than discovery or examination of different meanings (*doxa*). These factors contributed to limit the scope of PT within an asymmetric relationship between students, with SpLD students invariably being placed in a more passive role, rather than in one where they worked actively with their peers (*habitus*). They also caused differences between teachers and students regarding the aims of this approach. This was supported by Tan and Chua (2015), who explain that the belief and prior experience of teachers profoundly influences their perception of the value of collaborative learning.

It is not realistic to introduce PT policies with the assumption that meaning will be shared between stakeholders in the target country and home country. According to Alothman (2014), educational practices should be understood in relation to the culture and beliefs of the originating country. This makes it important to consider the challenges that might arise from the introduction of this concept and to provide clearer guidelines that provide more details about the nature, aims and types of PT. More training workshops for both teachers and students are essential to develop their understanding of this approach and to clarify the implementation of this approach in Saudi schools. SEN supervisors should also participate in training workshops to raise their awareness about the notion of PT and empower them to better help teachers and students to acquire a clear and comprehensive understanding of the meaning and aims of PT. These steps would be likely to make a meaningful improvement the current implementation and increase the benefits of this approach.

Another problem with the lack of translation of PT during its adoption into the local context was the lack of collaboration among stakeholders, such as

SEN supervisors, mainstream teachers and headteachers. According to Phillips and Ochs (2003), the adoption of a policy to change the educational sector is influenced by decisions made by authorities, such as policymakers and school governors, as well as the behaviour of individuals, such as headteachers and school advisors. Prior to the implementation of PT, a collaborative community should have been established within each school, facilitated by a supportive leadership invested in making the schools more open to inclusive practices (Kilgore et al., 2002), such as PT. This might be achieved by raising the awareness among headteachers and other school staff to the potential benefits of PT for SpLD and their typically developing peers, as well as illustrating the value of this approach in establishing positive relationships between students (Carter et al., 2013). SEN teachers could also play a vital role in establishing an inspection system to investigate the problems faced by SEN teachers with their school community and then work actively and collaboratively to solve any conflicts that are identified.

Other issues associated with the lack of PT policy translation were related to the lack of consideration giving to time, resources and the physical environment of the classrooms. Half of the SEN teachers suggested the consideration of a number of contextual factors, such as the large size of typical classrooms (S2ST6). These factors can make it less feasible or effective to implement and manage techniques specifically designed for small groups. Although it might be difficult to decrease the number of students in classrooms, teachers would still benefit from SEN supervisors giving more guidance or alternative options for teaching strategies. For example, supervisors could facilitate the implementation of PT in the learning resources room, ensuring the assistance of mainstream teachers who can collaborate to find a time for typically developing students to meet with SpLD students in the learning resources room, or even suggesting the implementation of PT among SpLD students, if viable. Additionally, a reduction of the paperwork

obligations that SEN teachers must provide to SEN supervisors would increase time available for planning and supervising PT sessions. Supervisors could also make a major contribution to the success of PT programmes by allocating the required resources to support the implementation of this approach.

5.5 Summary (peer tutoring through the lens of activity theory)

This study utilised the framework of AT as a thinking tool to identify which contradictions and tensions within the different components of PT activity were more likely to affect the intended outcomes being achieved (Yamagata-Lynch, 2010). One of the first tensions to emerge was the identity and place of SpLD students (subject). Here, the provision of inclusive practices, such as PT, clashed with dominant pedagogical strategies inherited from traditional teaching and learning practices. This conflict was revealed from the attitudes of educational community that surrounds SpLD students (*community*). Despite policies that encourage inclusive practices (*rules*), SpLD students were overwhelmingly identified in terms of their weaknesses, which limited their engagement with their typically developing peers during PT sessions (*division of labour*). This perspective situated students in terms of their disability and neglected the potential benefits of activating their roles in enhancing their learning within their ZPD. The introduction of PT in mainstream classrooms could change the distribution of classroom roles or move the authority of knowledge among teachers and students, resulting in stakeholders assuming different functions and responsibilities. However, the observed tutoring activities still utilised an approach to the division of labour based on the relational structure, which originated from a traditional model of teaching and learning. This situated tutors in a central role, as experts or 'small teachers', with students with SpLD placed in peripheral, passive roles with correspondingly limited participation in the process (*division of labour*).

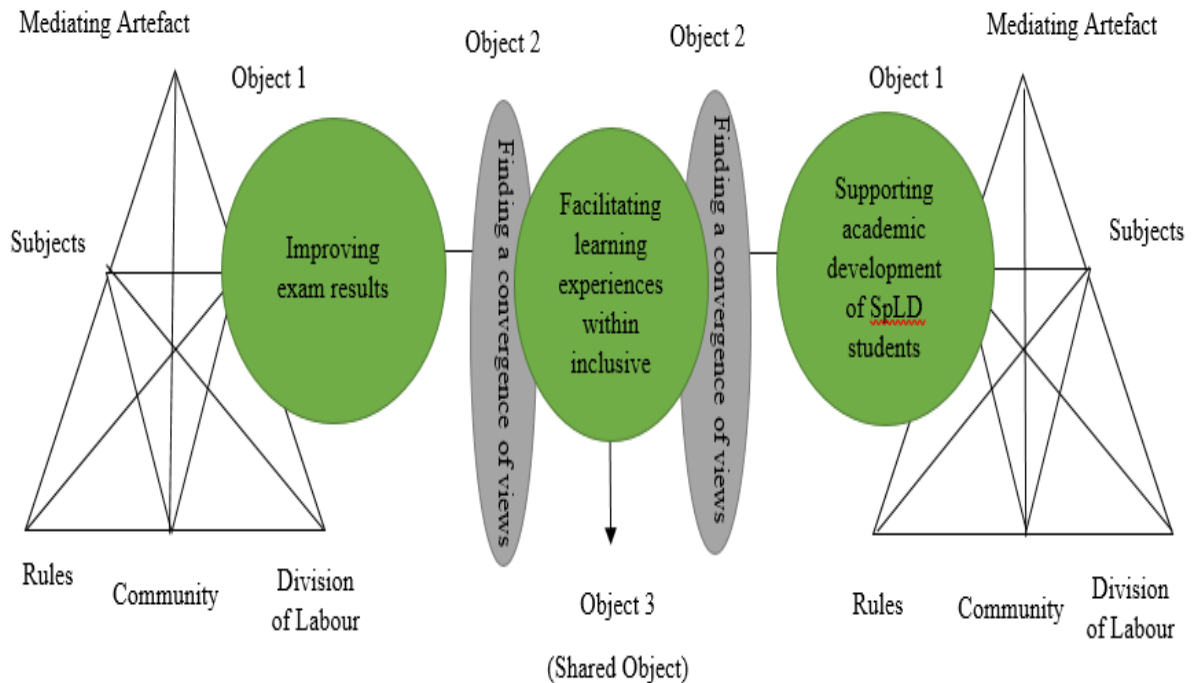
Tension also arose in terms of different interpretations of the aims of PT, between the participants and within the wider educational community. The AT perspective focuses on motives (Leont'ev, 1981), which in this case was the provision of support to SpLD students. However, this study found that the perceived effectiveness of PT (*outcome*) was influenced by numerous academic and socio-emotional aims (*object*) as a consequence of the tensions arising from the varied expectations of stakeholders (*subject*). Another contradiction revealed was the different perspectives of SEN teachers and students on training for PT. SEN teachers were confident about the training provided and the corresponding capacity of tutors to support their peers. In contrast, peer tutors felt completely unprepared to perform their role. The division of labour indicated that almost all tutors were not being given the opportunity to develop their teaching and facilitation skills, resulting in a conflict between the division of labour, objects and expected outcomes. Tension was also observed between mediating tools and the objects when tutors were not provided with adequate resources to facilitate tutorials effectively (*tools*).

Relationships between the SEN teachers and mainstream teachers were often tenuous (*community*), with most cases suffering from insufficient collaboration to create a structure or systematic approach to PT. Neither headteachers nor SEN supervisors fulfilled more than superficial roles in the process. This was mainly due to the separation between the pre- and in-training courses provided to mainstream and SEN teachers concerning the allocation of responsibility for supporting SEN students. This was exacerbated by locational divisions between SEN and mainstream teachers, who have separate offices and did not usually work together in the mainstream classrooms. In the context of the implementation of PT, this separation of responsibilities related to the concepts of boundary crossing and boundary objects in the third generation of AT (Engeström, 2001). Boundary

crossing indicates the opportunities that individuals or groups take (*subject*) to interact and collaborate within or across institutions to establish or create new boundary objects, and therefore new opportunities for learning and development (Akkerman and Bakker, 2011). Boundary objects are a result of the integration or participation between stakeholders, such as the collaboration between the MoE and schools to improve the quantity and quality of educational resources (shared object). However, in this study, these concepts hardly existed regarding the work of SEN and mainstream teachers, who were isolated in their experience of becoming teachers and in their responsibilities to support SpLD students.

Evidence was also found of conflicts between two activity systems, as discussed in third generation AT (Engeström, 1999), although this was not explored in detail in the current study. In this study, conflict can be explained in terms of the interaction between a dominant activity, namely regular teaching in mainstream classrooms (mainly based on the teacher-centered approach), and a non-dominant activity, which is the implementation of PT (see Figure 5.1).

Figure 5.1 Tensions between two activity system



Regular teaching

Peer tutoring

(Source: adapted from Engeström, 2001, p.136)

According to Engeström (1999), evolutions usually occur when tensions exist between different activity systems. He argues that these tensions are healthy because they are the “motive force of change and development” that allow people who work in different activity systems to identify and solve collaboration challenges with the aim of interacting and sharing their own objects (aims), which can then result in the creation of new shared objects between the systems (Engeström, 1999, p. 9). For example, identifying tensions between PT and traditional teaching strategies can help mainstream and SEN teachers to collaborate and share aims, such as improving exam

results (object 1) and supporting the academic development of SpLD students (object 1). This can enable a convergence of views (object 2), eventually leading to the creation of a new shared aim, such as facilitating learning experiences within inclusive settings (object 3). However, when an activity is excessively dominant, it can create a situation in which change does not occur, reflecting the reinforcement that regular teaching practices receive from the socio-cultural context. In this study, despite SEN teachers being positively disposed towards the teaching of peer tutors, many mainstream teachers did not accord this activity the same respect, leading them to neglect to provide support. In fact, the activity system of PT was often in conflict and hindered by the activity system of regular teaching. This underlines the importance of implementing measures, such as mediation, to ensure that innovations are protected from the influence of dominant activities (Sannino, 2008).

5.6 Conclusion

This chapter has discussed PT practices and policies within the specific Saudi Arabian culture. The findings suggested that PT practices regarding students with SpLD were primarily directed through the unidirectional model of interaction, which frames the teacher as a ‘transmitter of knowledge’. A discussion has also been provided of the concepts of normality, weakness and superiority within Saudi culture and the way that these affect the understanding and implementation of PT within a middle school setting. SpLD students were primarily evaluated in terms of their impairments and were found to have mainly acted as passive recipients of peer tutor communications. Furthermore, peer tutors were principally selected on the basis of academic excellence, which served to emphasise the typical issues associated with tutees being supported by more competent peers.

The primary motivation for most teachers to implement PT was to address their lack of subject-specific knowledge, meaning that PT was generally perceived as being a problem-solving technique for addressing inherent weaknesses in the system. Many SEN teachers were found to rely heavily or even exclusively on mainstream students to teach new skills to SpLD students, without providing instructions on the subject content. This raised important ethical concerns regarding the replacement of classroom teachers as primary educators, the voluntary nature of PT, the need to obtain parental permission, and the provision of rewards for involved parties (see section 5.2.4).

The perception of PT was generally that it is an effective method to facilitate the learning of students with SpLD. Participants associated the approach with enhanced performance and achievement, improved motivation, and higher levels of student participation. In this way, the findings support those of many other studies conducted into PT. However, students were found to be largely unaware of the socio-emotional aims of PT, leading them to focus on the provision of academic support, sometimes exclusively, thereby missing an opportunity to enrich the social development of tutees. As this was not addressed by systematic planning or effective collaboration between teachers and students, it seems likely that this perception would pose a major challenge to the effective enactment of wide scale PT programmes.

A number of barriers to the implementation of PT were discussed in this chapter, namely the lack collaboration between SEN teachers, mainstream teachers and other school staff, the limited support provided by SEN supervisors, the lack of opportunities for training and professional development, the lack of time, resources and scheduling issues, as well as the lack of official guidelines and policies that support teachers in their implementation of PT. Most importantly, the chapter discussed the need for the modification of PT policies to ensure full adherence to the Islamic

principles of inclusivity and to better suit the specific cultural and educational context of Saudi Arabia.

Chapter Six Conclusion

6.1 Introduction

This chapter summarises the key findings of the study and discusses the potential contributions of its findings to the policy development, research and practice of PT. It also makes recommendations for future studies in this field.

6.2 The Main Findings and the Contributions of the Present Study

An early review on the use of PT to support and develop SEN students found that most empirical studies in the field focus on PT outcomes within controlled research settings via the use of experimental and quantitative designs, rather than on the attitudes and perceptions of participants. These investigations tend to focus on the primary school stage, with very few that investigated the perceptions and experiences of stakeholders, or that considered the use of PT to support SpLD students. Hence, this study added to the current literature by examining the perceptions of the main stakeholders (teachers, students and supervisors) about their understanding and implementation of PT to support SpLD students in middle schools.

The current investigation is novel in that it examined the implementation of PT in the Saudi context, where teacher-centred approaches are still dominant in most schools. It made an original contribution through the following: a focus on the perceptions, experiences and practices of participants, rather than tutees' achievement; an interpretive, qualitative research framework, which is less used in Saudi educational research; and a focus on interpreting perceptions within the specific religious-cultural context of Saudi Arabia, which provided insights into how culture and religion colours perspectives of PT. The examination of a pedagogical approach through the lens of religion

and culture with the support of the theory of practice (Bourdieu, 1990) and the concept of CoP (Lave and Wenger, 1991) provided insights into the influence of Islamic principles and of the traditional, collective and conservative culture of Saudi Arabia on the understanding and implementation of PT, as well as on collaboration among students and professionals within participating Saudi schools. The study also contributed to the national debate on education reform and policy development, especially the cutting edge policy vision 2030, which seeks to shift authority of knowledge from teachers to students. It revealed how the practice of policy borrowing has largely neglected the entrenched knowledge-transmission culture of teaching that remains dominant in Saudi Arabia.

The use of the AT as a thinking tool to examine PT practices within the specific context of Saudi Arabia offered valuable insights into the values and beliefs held by the participants (*subject*), as well as a better understanding of associated cultural conventions, policies and norms (*rules*) and their impact on participants' understanding of PT aims (*object*) and thus their influence on the perceived effectiveness of this approach (*outcome*). AT also facilitated analysis of the roles played by teachers and students (*division of labour*) and the level of authority during PT activities. Furthermore, this framework enabled examination of the ways in which the lack of resources (*tools*) and the lack of collaboration among SEN supervisors, mainstream teachers and headteachers (*community*) could hinder PT practices in Saudi schools.

This study highlighted limited understanding among SEN teachers regarding the nature and scope of PT, which primarily implemented within a unidirectional model of interaction. Mainstream student tutors were viewed as secondary teachers, with the corresponding responsibility for the delivery of knowledge to SpLD students, leading to delegation of similar responsibilities within the traditional hierarchical classroom model. This approach placed mainstream students in dominant roles and SpLD students

in passive roles (*division of labour*). This limited implementation of PT seems to have been influenced by the concepts of ‘weakness’ and ‘normality’, rather than diversity, with SpLD students often being defined in terms of their weaknesses. As a consequence, mainstream ‘normal’ students were generally considered to be the only ones capable of offering appropriate support to their peers with SpLD (*subject*).

These findings suggested important differences between recent studies conducted in western settings and the current practices of PT in the Saudi context. The Saudi implementation of PT illustrated a traditional, linear perception of education, from the teacher to the peer tutor to the peer tutee. This approach often resulted in the selection of peer tutors based on their subject mastery, without recognition that the helping interaction is heavily reliant on different characteristics than those in typical teacher-student relationships. This differs from the tendency identified in western studies towards more equitable PT relationships, with both students gaining from the process (Topping, 2005; Topping, 1996), an outcome that is perceived to be more meaningful and credible (Roscoe, 2014). Recent western studies have stressed the importance of facilitation and problem-solving in PT, rather than teaching *per se* (e.g. Adams, 2011; Rasku-Puttonen et al., 2003; Clarkson and Luca, 2002). In essence, this argument is that PT should complement the active role played by the teacher (Thompson, 2011), while encouraging students to invest in their learning. This reflects a shift in western educational systems – which has yet to occur in Saudi Arabia – towards learner-centered curricula, serving autonomous, independent, collaborative students.

The differences between recent PT practices in the west and the current practices in the Saudi context was attributed to the impact of doxa (commonly held values and beliefs) on habitus (individual creativity within society) regarding PT. This study showed that a relationship exists between the culture of teaching and learning and the extent to which changes can be made given

the strength of the *doxa* on societal and educational norms in Saudi Arabia. Studies suggested that the culture of teaching in Saudi Arabia is widely influenced by the traditional Qur'an schools, which focus on direct instructional techniques in teaching Islamic principles (Alsayegh, 2014), instead of encouraging the search for answers. This suggests a desire to protect Muslims from receiving incorrect information that might negatively affect their religious beliefs and values (*doxa*). The Saudi teaching and learning culture was also influenced by traditional collective culture, which stigmatises disability due to its difference from the public familiar image, which is rooted in concepts of normality and conformity (*doxa*). This may explain why the concepts of 'normality' and 'weaknesses' were used by participants when differentiating between mainstream students and those with SpLD.

However, the principles of Islam stress that individuals have a responsibility irrespective of their disabilities or weaknesses, to search for knowledge and broaden their minds. This teaching stresses the importance of each person using their own senses rather than receiving the truth from others, as strengthens their belief in God. This perspective is supported in many 'surahs' in the Qur'an. For instance, in Surah AL-Imran, Allah the Almighty says:

Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for those of understanding. Who remember Allah while standing or sitting or [lying] on their sides and give thought to the creation of the heavens and the earth, [saying], 'Our Lord, you did not create this aimlessly; exalted are You [above such a thing]; then protect us from the punishment of the Fire (3:190-191).

In surah Yusuf, Allah the Almighty also says, "we raise in degrees whom We will, but over every possessor of knowledge is one [more] knowing" (12:76).

The Qur'an makes little explicit mention of disability, but stipulates that equality is a religious obligation, with differences not suggesting inferiority. Instead, it states that differences exist for people to use their varied capabilities to construct the earth and improve their lives, encouraging collaboration in the promotion the common good (Moqbil, 2015), which could enable an application of capability theory. The capability approach offers an alternative perspective on disability: inequalities between people are created by differences in ability, as well as by social, political and environmental factors (Sen, 1999). These inequalities may be transcended by improving personal capacity and overcoming external cultural barriers, suggesting that education should play an important role in enabling this self-development (Glassman, 2011). This approach also argues that individuals should develop capabilities according to their society (Sen, 1999), making it compatible with the Islamic notion of equality, as well as the cultural and religious framework of Saudi Arabia.

The capability approach encourages educators to focus on the capabilities of individual student rather than their actual functioning, with the aiming of giving them sufficient resources or means to use their own capabilities to reach their potential (Harnacke, 2013). This seems to comply with Islamic principles, which stress the importance of considering the differences between individuals, as was evident from the various techniques used by the Prophet (pbuh) to teach his companions. These strategies included using questions to motivate learners and extract their talents; reinforcing techniques; repetition using different intonations; dividing tasks; and even individual and collaborative teaching methods (Alsafadi and Alastal, 2010). These approaches are essential in teaching students with disabilities, as they need different resources and teaching techniques to enable them to access information and make better life decisions (Glassman, 2011). It may therefore

be possible to utilise a capability approach in the development of PT to support students with disabilities in Saudi Arabia.

Criticisms of the capability approach primarily focus on its limitations in identifying the capabilities that should be taken into account when supporting SEN students (Clark, 2005; Robeyns, 2000). However, adopting this approach may be a viable way to improve current PT programmes in Saudi Arabia by changing teachers' perceptions about the needs and abilities of SpLD students (Norwich, 2014). In other words, developing an ethos of activating individuals' capabilities might be a way to encourage teachers to allow SpLD students to take more active role during PT activities. For example, assigning SpLD students to help other students with learning disabilities, or even to support their typically developing peers, could enhance their learning experiences. This objective would involve effective assessment of the strengths of these SpLD students, as they do not normally suffer from difficulties in all learning contents. When SpLD students lack mastery of the learning content, the mutual interactions among students – including shared questioning, collaborative dialogue and examining different arguments – can still be valuable in the construction of meaning and re-examining personal understanding (Holecek, 2012; Duran, 2010). In this way, PT can also promote justice within schools by offering equal educational opportunities for students and helping them to become full participants in their community, which is the primary aim of the capability approach (Dalkilic and Vadeboncoeur, 2016; Glassman, 2011). Even if SpLD students were tutored by their typically developing peers, tutors should be trained to engage their partners by guiding them to use learning strategies that encourage independent problem-solving, such as dividing educational task and using concept maps. This is another aim of the capability approach, which focuses on “ensuring that individuals are able to exploit these capabilities in relevant everyday activities” (Glassman, 2011, p. 164).

Despite the limited understanding of PT, the present study illustrated that the majority of participants believed that PT was more beneficial to SpLD students than traditional classroom activities. They attributed improved academic performance, achievement, motivation and participation (*outcome*) to peer-oriented activities, characterised by a friendly atmosphere, an individualised approach, and close relationships between peers, with opportunities to seek for clarifications or emulate successful students. These results are supported by studies into the efficacy of PT with SEN students (e.g. Jo, 2015; Dufrene et al., 2010; Kotsopoulos, 2008) and the primary mechanisms by which this approach achieves its aims (e.g. Karagiannakis, 2008; Fulk and King, 2001; Utley and Mortweet, 1997).

Regarding socio-emotional skills, despite many SEN teachers aiming to fulfil socio-emotional aims through the PT programme, the majority of students felt that PT offered few real socio-emotional benefits to students (*outcome*) because the primary, or exclusive, goal of the programme was academic support (*object*). This suggests limited systematic planning and communication between students and teachers prior to the commencement of PT. From an AT perspective, this can be understood in terms of the contradictions and failures that can occur in the functioning of a system (Engeström, 1987). The differing interpretations that teachers and students can have of the aims of PT constitute a major contradiction in the system, which is likely when multiple identities and needs complicate its operation (Engeström, 2009). This perspective suggests that the successful, harmonious implementation of a PT programme requires parties to have shared knowledge of the aims and that they might even benefit from shared participation in setting goals (Carter et al., 2013; Miller, 2005). As this may also help students to take a more active role in their own learning, awareness building and reflection should be incorporated into classroom activities

(Carter et al., 2015). In this way, students could redefine their perceptions of PT, as well as reinforcing the learning undertaken during the session.

Despite the benefits of PT, the role of the teacher should not be neglected, and all steps should be undertaken to ensure targeted outcomes are met (McMaster, Fuchs and Fuchs, 2007). The effectiveness of this approach can be limited by factors that include: tutors' mastery of the content (Schneck, 2010); the quality of talk and interactions among peers (Korner and Hopf, 2014; Murphy, Faulkner and Farley, 2014); the type of questions provided by tutors (Roscoe and Chi, 2007); or lack of interest among students regarding the idea of working in pairs (Ayvazo and Aljadeff-Abergel, 2014). Therefore, PT is one of many different teaching approaches that could benefit SpLD students and empower them with more authority for their own learning, rather than relying on the notion of the teacher as the main source of knowledge (Berghmans et al., 2013). This seems to be the heart of educational reform in Saudi Arabia, as illustrated by the aims of the 2030 vision.

Changing the authority of knowledge in the Saudi context might conflict with the dominant role of teachers, which arises from the family oriented approach in education (*doxa*), in which teachers to play a similar role to that of parents in passing knowledge and values to students. Therefore, activating the role of students and achieving the aims of the 2030 vision requires the culture of teaching and learning in Saudi Arabia to be revisited, emphasising the Islamic approaches to learning by actively reading, discovering and thinking about the world, rather than passively receiving abstract knowledge from others, a finding of fundamental importance in the religious society of Saudi Arabia. Changes can also be hindered by a lack of the notion of CoP at the classroom level that encourages students to exchange their knowledge and to work collaboratively during the lesson. Mainstream students were encouraged to participate in PT as a form of charity, with teachers reminding tutors of the rewards they would receive from god. Devotion to Allah was the primary

motivation for approximately half of the peer tutors. Although this facilitated the implementation of PT, enhancing the sense of community might further improve the current practices of PT or other collaborative approaches in Saudi Arabia, with those involved in supporting students with disabilities transcending charity to enter a spirit of free communication and exchange. The informal, dialogical approach to school life might help pupils to exist harmoniously, as part a collaborative knowledge-sharing community (Wells, Chang and Maher, 1990). It may be possible to achieve this aim by encouraging students to discuss their understandings with their peers during lessons, encouraging the exchange of ideas, rather than passively receiving information from teachers. According to Crossouard (2009), establishing a CoP requires students to be given increased opportunities to engage in collaborative activities with their teachers and their peers in order to construct meaning, share their experiences and build shared identity. This position is congruent with the stance of Islam, which strives to create a unified stance among all Muslims, predicated on a sharing of knowledge and values under the auspice of a single unified faith (Abdul Rahman and Muktar, 2014). Given the importance of Islam in the Saudi context, it would be essential to link the implementation of CoP in schools by showing how it exemplifies Islamic values. The focus on learning through dialogue and cooperation also correlates with the socio-cultural perspective on learning (Boud and Solomon, 2001; Bruffee, 1999). In this way, collaborative learning can play an important role in cultural change, empowering students to communicate more effectively and share mutual respect during PT activities (Fougner, 2013), bringing them into the new learning community created and embodied by their teachers (Niemi, 2009).

The findings of this study provided insights into a number of challenges that not only affected the implementation of PT, but also inhibit the successful inclusion of SpLD students. These obstacles included the lack of training

among SEN teachers regarding SEN provisions, including PT; limitations in terms of space; poor collaboration between teachers; a lack of support from headteachers and SEN supervisors; limited time; heavy workload; limited human resources; and an overall lack of guidelines, especially those shaped by culturally aware policy borrowing.

SEN teachers indicated a need for training courses in special needs education, especially in terms of PT programmes, supported by ongoing professional development. These courses should increase awareness and develop competency in various teaching approaches to support SpLD students within inclusive schools. With specific reference to PT, teachers should be trained on lesson planning, setting clear aims, student selection, and techniques for supervision and assessment during PT activities (Topping and Ehly, 2001). Most importantly, teachers should be informed about the importance of training tutees in their expected roles in PT relationships (Colvin and Ashman, 2010). In addition, teachers should learn about the components of training required by peer tutors, such as the development of disability awareness (Houston-Wilson et al., 1997); competence with the unique communication techniques employed for SEN students (Villareal, 2013); and greater knowledge of strategies to ensure the active participation of SpLD students.

Another problem identified in terms of the implementation of PT was large class size. Having large numbers of students can result in limited space (*tools*) available for pairing students and managing student interactions. This led a number of SEN teachers to suggest the introduction of TAs in Saudi schools. However, large class sizes could create additional difficulties for TAs, preventing them from walking easily among students to observe and support those with LD. Most importantly, the negative attitudes observed among some mainstream teachers in this study might result in TAs being rejected in

some classrooms. This was also evident from mainstream teachers' rejection of the notion of co-teaching and their lack of collaboration with SEN teachers.

The aforementioned problems with poor collaboration between teachers (*community*) was primarily attributed to the lack of CoP between mainstream and SEN teachers in Saudi Arabia. Different factors could be responsible for this, such as the fact that mainstream and SEN teachers study on different initial teacher education programmes and receive CPD in isolation. This difference seems to be exacerbated by the lack of shared teaching responsibilities and the fact that education supervisors come from different departments, as well as the lack of knowledge among mainstream teachers about their responsibilities and the roles of SEN teachers in supporting SpLD students. This underlines the importance of addressing the wider aspects of teacher socialisation, which could be achieved by considering possible changes at both cultural and institutional levels (Mulholland and O'Connor, 2016). At the cultural level, it is important to deliver university level education modules to raise awareness about the role of mainstream teachers in collaborating to support SpLD students. At the institutional level, shared training opportunities should be provided for both SEN and mainstream teachers, in addition to clear guidelines outlining their responsibilities to work collaboratively. However, training is insufficient without actual practice and experiences (Ng and Tan, 2009), such as cooperation during planning and implementation of activities to support students with LD (Hedegaard-Soerensen et al., 2018).

School culture can also influence collaboration between SEN and mainstream teachers (Woolfson and Brady, 2009). In particular, headteachers can play an essential role in fostering and enhancing a collaborative culture, such as by facilitating meetings between the teachers and encouraging them to plan learning activities and assessment methods for SpLD students. However, this study revealed that many headteachers at participating schools lacked

knowledge about SpLD, played no role in the provision of instructions or resources to support the implementation of PT, and were sometimes even unwilling to resolve issues or scheduling conflicts among teachers. Almost all SEN supervisors held a similar stance, preferring to place the onus on SEN teachers to solve their problems, such as limited time (*tools*); heavy workload; limited number of SEN teachers (*tools*); poor collaboration with mainstream teachers (*community*); or the lack of guidelines for implementing PT (*rules*). However, the high level of centralisation of the Saudi educational system means that improving current practices requires extensive top down support to remove systemic obstacles. It is therefore important to raise awareness among headteachers and SEN supervisors (*community*) regarding the importance of their role, not only in supporting the implementation of PT but also in increasing the successful implementation of other inclusive practices for SpLD students. The MoE needs to establish a rigorous monitoring system to monitor and identify the problems faced by teachers, and ensure that these problems are solved by stakeholders.

Another obstacle to improving the implementation of PT was the notion of policy borrowing (*rules*), with many imported rules being found to have neglected the unique teaching and learning culture in Saudi Arabia. This can be illustrated through the evolving perspectives of different countries on classroom techniques. For example, many recent US studies into PT have shifted focus to the implementation of PT as a class-level, inclusive strategy, rather than one applied to a few learners (e.g. Jo, 2015; Lundblom and Woods, 2012; Maheady and Gard, 2010; Ayvazo and Ward, 2009). US schools have sought to utilise PT to promote equal opportunity through the implementation of class-wide, cross-year programmes informed by the notion that being helped teaches students how to help others more effectively (Topping, 2005). Students who are given assistance also help other students, making all participants feel valuable, valued and supported. Giving all students the

opportunity to participate reduces asymmetry between tutor and tutee, as well as lowering the stigma associated with receiving help. This is because students who receive assistance in one subject might also be able to use that knowledge to provide similar help to younger students, or to peers in another subject. In this way, it becomes apparent that even the strongest students might also require help from others. However, despite the apparent advantages of this approach to PT, the shift to reciprocal, collaboration-based learning in Saudi Arabia would be frustrated by the doxa and the dominant role of teachers within the traditional collective culture, which constrains the teaching profession within rigid societal norms. In essence, the degree of influence that societal norms (*rules*) and doxa have on an activity relates to the desired culture of learning. The strong association between educational goals (*object*) and societal attitudes and beliefs (*community*) may mean that this relationship is stronger in education than in other fields. Where the doxa indicates that the preservation of stability is important and the habitus does not give individuals the opportunity to be creative in their adaptation to social norms, it is more difficult to change. In these contexts, it may be more appropriate to implement small-step, incremental changes than larger ones. Based upon this interpretation, the current implementation of PT in Saudi Arabia may benefit from the adoption of a ‘policy learning approach’, in which useful examples are utilised to enrich analysis and the development of educational policy in accordance with local needs (Raffe, 2011).

This understanding indicated the importance of working on the culture of teaching and learning by raising awareness among teachers, encouraging them to move from a knowledge-transfer paradigm to the adoption of a more democratic approach to learning that empowers students and makes them central to the learning process. Additionally, it is important to consider that many teacher-focused strategies require certain approaches to student evaluation, such as performance-based assessment (Ismail and Alexander,

2015). The current assessment system in Saudi Arabia is based on the transfer of knowledge to students and individual testing, which encourages competitive behaviour. Saudi middle schools have two exams in each term, a mid-term and a final exam, the results of which being used to determine the end of year grade awarded to students. This system should be developed to foster cooperation between students, with greater provision for group activities and peer support. In addition, the MoE should adopt a less centralised approach, permitting schools to tailor their regulations to meet local needs and giving teachers more flexibility to use alternative assessment approaches. Reforming the educational system in this way could positively affect the use of PT, as long as changes were based on investigation of the current situation at local and national levels (Fullan, 2007). These developments of the general educational system could be carried out in conjunction with ongoing changes to teacher training, and curriculum development (Levin, 2001).

In summary, the outcomes of this research have potentially added to the understanding in the field through examination of PT within an Islamic framework. At the time that this study was undertaken, PT programmes typically followed a largely unidirectional model, in which peer tutors were responsible for the delivery of content knowledge to their peers. This study suggests that a focus on human capabilities may be an effective way to improve the implementation of PT provision by accounting for the factors most relevant to the topic of diversity in education.

The findings suggested a way for effective PT programmes to be run within the unique doxa, habitus and field of Saudi Arabia. This thesis argues that these concepts can be utilised alongside AT to deepen understanding in education research. In particular, combining the theory of practice with AT provides valuable insights into the influences of PT on education and their sources. Improving PT practices in Saudi Arabia requires better preparation

of teachers and students, clearer guidelines, sufficient resources, and more active encouragement of school staff and SEN supervisors.

6.3 Strengths of the Study

The current study has a number of key strengths. The positionality of the researcher as an insider was vital in understanding the nuances of teaching and learning within an Islamic framework; in building a rapport with the participants; and in interpreting participants' perceptions within the religion and culture on the culture of teaching and learning in Saudi Arabia, as well as on attitudes towards disabilities. This was also enhanced by the fact that the researcher has experience in teaching SpLD students, which benefitted the initial meetings with teachers by demonstrating awareness of various issues related to special educational provisions, thereby helping teachers to relax and feel understood. This teaching experience was also beneficial in communicating with SpLD students and helping them to feel relaxed before conducting the interviews.

Other strengths identified in this study were the use of the case study approach, which allowed for triangulation of data from semi-structured observations, semi-structured interviews and document analysis. This enriched the data various angles, including the views of participants (interviews), the actual practice (observations) and policies (document analysis). The decision to gather data from supervisors, teachers and students enriched this study and provided data from different perspectives of those playing different roles in PT. The document analysis also added to the richness of data, by enabling examination of the extent to which policies and guidelines shaped the current practices of PT.

6.4 Limitations of the Study

The present study was constrained by a number of limitations. The reliance on a small number of participants limited the qualitative generalisations of the findings, particularly given the highly specific nature of the subject matter. Additionally, it was not possible to include more teachers or students in this study, because of the small number of teachers with sufficient experience in implementing PT (namely those nine teachers across six schools who met the minimum experience of one year). Interviewing other stakeholders, such as mainstream teachers and parents, may have provided additional insights, particularly regarding the factors that could facilitate or hinder the implementation of PT. However, it was not possible to involve other stakeholders in this study due to time constraints and because the study focused on interviewing participants who had direct influence on informing and delivering PT policies to support SpLD students.

Furthermore, this investigation was conducted in all-female schools. This decision was made because the researcher did not have access to all-male schools and because there are no comprehensive schools in Saudi Arabia. All-female schools that had already implemented PT in one city (Riyadh) were included in this study. It is important to note that the intention of this case study was not to generalise the findings to other PT settings, even within my own, larger data set. However, it is hoped that this study will prompt further studies into the engagement of children with SEN in PT activities, especially those examining the impact of religion or culture.

The qualitative nature of this study also implied greater subjectivity in data collection and analysis on the part of the researcher. This means that while being a Saudi researcher enabled a better understanding of the data within the unique Islamic and Arabic context of the study, it may also have created a level of bias that could have negatively influenced the collected data.

Therefore, it was essential to minimise the subjectivity of the researcher by gathering data from different stakeholders, such as teachers, mainstream students, SpLD students and supervisors, as well as by discussing the findings with participants, in order to ensure that their perspectives with regards to PT were captured and presented accurately.

A more detailed insight into the impact of PT provisions might have been possible through an ethnographic study, in which the researcher would be immersed in the study context (Parker-Jenkins, 2018). However, this was not possible in the current research, due to limitations of time and access. An attempt was made to compensate for this limitation with the triangulation of data from different participants using different data collection tools.

6.5 Implications and Recommendations

Most studies on PT have focused on assessing the impact of PT on students' attainment through the use of experimental designs that measure their improvement before and after participation in this approach (e.g. Grünke, Janning and Sperling, 2016; Hudson, Browder and Jimenez, 2014; Lingo, 2014), with very limited investigation of attitudes and perceptions (e.g. Thompson, 2011; Vogel, Fresko and Wertheim, 2007), particularly with students with SpLD. A focus on achievement prevents teachers and students from fully understanding PT. Therefore, this study argues that a comprehensive review of the topic is required to inform sensitive, change. This is particularly apposite in the Saudi context, given the rapidly increasing school population and extensive school building programme, which requires gradual adoption of new changes, rather than a radical transformation of the existing system.

6.5.1 Raising awareness: perceptions of PT and disability

1- At the Ministry level, mutual discussions should be established between researchers and policy-makers about the use of PT in the light of a capability approach, not least because it complies with the Islamic principle of equality. The notions of 'normality' and 'weakness' should be minimised by building capability in schools and by providing SpLD students with different opportunities to develop their strengths, take responsibility for their own learning, and function within a collaborative learning environment. The capability approach stresses the importance of exploiting the abilities of SpLD students to maximise their potential, meaning that it may be an effective way to raise awareness among teachers regarding the value of fostering mutual interactions within PT activities. These could be viable ways for students to take a more active role in expressing their ideas, searching for answers, challenging the arguments of their tutors, or even have taking responsibility for tutoring other students within their areas of strengths.

2- Awareness raising should also be conducted at a school level through policy changes, with SEN supervisors and teachers examining the use of PT in the light of a capability approach and discussing ways for SpLD students to play more active roles during PT sessions, such as encouraging engagement or giving them responsibilities for helping other students.

3- Awareness should also be raised at home, by informing parents about the purpose and goals of PT and how this strategy can be used within the capability approach. This requires schools to arrange meetings with parents to increase their understanding of how this approach is associated with the Islamic principle of equality and disability, and how PT can minimise the association of 'weakness' with SpLD students.

4- At a societal level, dialogue should take place between the MoE and religious leaders, promoting understanding of disabilities through collaboration with the sheikhs in masjids, on religious TV channels, and on social media. This approach should stress a sense of community, helping all citizens feel a sense of belonging and commitment to support the community, regardless of their disabilities. The MoE and schools are also directly responsible for educating individuals about people with disabilities through the previous channels.

6.5.2 Training

1- The ITE course at Saudi universities needs to be redesigned to better prepare teachers for the implementation of student-centered teaching methods, such as PT. The pre-service programme should offer solutions to potentially problematic issues, such as the definitions of PT, or teachers' perceptions about authority of knowledge, student roles, and the nature of teaching and learning. Training should be given for core skills, like planning for PT activities, supervising and evaluating student progress. These courses should be supplemented with practical experience, moving away from the current emphasis on theoretical study.

2- The Saudi MoE should modify CPD programmes to prepare teachers for student-centered teaching approaches, such as PT (see above). Training should consider the organisational aspects of PT, including student characteristics, relationships, and the time and location of sessions (Topping, 2005), as well as planning and setting objectives. The role of the facilitator in supervision and assessment of PT programmes should be emphasised, and answers should be provided for any questions teachers might have about PT challenges. SEN supervisors should have clear inspection systems to ensure that teachers are activating and supporting student roles.

3- Comprehensive training should be given to peer tutors, including the aims of each PT activity, strategies to encourage active participation, and information about the strengths of SpLD students, rather than focusing on their weaknesses. Training should be given on creating supportive team environments, task monitoring, and empathic feedback, thereby encouraging facilitative, deep-level learning opportunities that benefit all students involved in PT.

4- Training sessions for peer tutees should establish norms based on the assumption that all people need help. This means that students should be reassured that giving and receiving assistance is positive and normal. As part of this process, both peer tutors and tutees should receive training on appropriate ways to request and accept or reject help from others. Importantly, training should emphasise the importance of actively engaging in PT, with both parties searching for answers and controlling their own learning.

6.5.3 Collaboration between professionals

1- Dialogue should be fostered among SEN and mainstream teachers at the school level, encouraging collaboration in supporting SpLD students and designing engaging teaching strategies. A notion of CoP should be established among teachers, encouraging them to work as a team to design and deliver educational programmes to bring pupils together. This would necessitate policy change to remove the existing power imbalance between SEN and mainstream teachers, by establishing precise guidelines with a detailed explanation of the roles of mainstream teachers in collaborating with SEN teachers to support SpLD students. Policymakers should also establish a rigorous inspection system to evaluate collaboration between teachers and find solutions to emergent conflicts.

2- Separating the training of mainstream and SEN teachers has negatively influenced collaboration. ITE and CPD provisions should educate both SEN and mainstream teachers on collaboration in the design of IEPs, planning teaching strategies and evaluating student progress. Collaboration should be institutionalised through the provision of time and resources to teachers, including quiet meeting places or access to ICT devices and educational games. This would help teachers to design learning activities that not only help SpLD students within mainstream classrooms, but also offer more opportunities for these students to play an active role with their typically developing peers, such as through PT or other collaborative learning approaches.

3- As a member of the IEP team, the school counsellor should also be trained to take a more active role in the implementation of PT, such as the selection and training of students for the role, or monitoring the ongoing programme. This might be an effective way to mitigate the heavy workload experienced by SEN teachers.

4- SEN supervisors should play a more active role in training SEN teachers on the implementation of PT activities, with more schools visits to observe and train teachers on PT practices, as well as to solve any emergent issues harming collaboration between SEN and mainstream teachers. For this reason, the MoE should increase the number of supervisors, raising awareness of their role in supporting teachers and decreasing their office workload to give them sufficient time to meet their job commitments, thereby improving the general quality of teaching.

5- Headteachers should actively promote collaboration among school staff concerning the implementation of PT. A warm, friendly atmosphere of respect should be consciously fostered, in which conflicts and solutions can be found between all IEP stakeholders. Headteachers are also responsible for

establishing a collaborative ethos, such as by facilitating meeting between teachers and allocating resources, and thereby improve communications between teachers. Headteachers can also provide access to meeting rooms and outline topics to be covered by teachers, including lesson planning, assigning students, designing learning activities, and deciding on assessment procedures.

6.5.4 Physical environment and resources

1- The chairs and tables should be reorganised in mainstream classrooms to better accommodate PT activities. Class sizes should be reduced wherever possible, enabling more effective PT and reducing the noise generated by other students.

2- PT activities should be enhanced by access to educational resources, such as ICT devices, educational games, flash cards, worksheets, and multi-media presentations. Awareness should be raised among teachers on the use of these resources to enhance student involvement during PT activities. Mainstream and SEN teachers should collaborate to decide the type of resources required to fulfil learning aims and to meet the needs of individual students. In addition, headteachers should actively ensure the availability of resources needed by the staff and students at their schools. Supervisors should also negotiate a budget for resources and student rewards with the MoE.

3- The implementation of student-centered approaches, such as PT, would benefit from reducing the intensity of lessons in mainstream classrooms, giving students more time to work collaboratively under the guidance of classroom teachers. It would also allow teachers sufficient time to train students, set up PT activities, and meet with students to discuss programme outcomes. This might require a long-term plan for revising and improving national curriculums. In the short term, more SEN teachers should be hired to

support classroom teachers in each school. Schools with a large number of SpLD students could be supported with TAs, who would ideally be trained to lead in PT.

6.5.5 Policy and guidelines

1- In light of the vision 2030, PT implementation should be supported by clearer guidelines and instructions for the facilitators and students. These guidelines should emphasise that PT involves changing the dynamic between teachers and students in the classroom (moving the authority from teachers to students) and offering all students (with and without disability) more voice and opportunities for participation. Hence, these guidelines should consider the complexity of PT, recognising the need for an application process, on-going training and clarity of roles for facilitators and students, which would help to address current contradictions. For instance, more clarifications are required regarding the role of facilitators in assigning, training and supervising students. This including due consideration of the criteria that should be considered when pairing students, such as their age, abilities, personal characteristics and their willingness to work in pairs. It also includes the components that should be considered for training students, such as teaching strategies, communications skills and disability awareness. Facilitators should also consider the roles involved in the supervision of PT sessions, such as providing immediate feedback and encouraging active participation, and for the students involved in PT, such as peer teaching, enhancing active work, assessing, and asking for clarification.

2- Developmental policies should move the current assessment system away from reliance on exams to an approach that promotes collaboration among students in classrooms. The MoE should reduce centralisation, giving teachers autonomy to use other kinds of assessment, thereby creating a more

positive, cooperative environment. This is important because the current, competitive assessment system in Saudi Arabia grades students on their ability to answer questions individually. This leads to greater emphasis on memorisation. Assessment procedures should be established to consider individual and group work, enhancing the importance of collaborative work among students.

3- Ministry policies should promote the current status of SEN teachers, giving them fixed schedules for SEN teachers to enable the provision of sufficient support for SpLD students. This can be achieved by organising initial meetings between mainstream and SEN teachers to discuss appropriate time in which students can receive support in the learning resources room. Headteachers will then be responsible for ensuring that mainstream teachers follow the agreed schedules and that they are informing SEN teachers in advance of any change that might occur. In this way, SEN teachers will receive sufficient time to make amendments to planned PT activities. Mainstream teachers could also teach fewer classes, giving more opportunity for SpLD students to receive sufficient support from SEN teachers during the day, or class duration could be increased from 45 to 60 minutes to enable the provision of support during lesson time.

6.6 Recommendations for Further Research

Given the aforementioned limitations, further research into PT is essential, especially in the Saudi context. This research observed positive outcomes when the teaching practice in Saudi classes shifted from traditional teaching methods to the use of PT. However, future research should include other stakeholders, such as mainstream teachers and educators at universities, as

their engagement would contribute towards a more complete picture of PT in the Saudi context.

Large-scale research could also investigate the impact of the MoE policy on the long-term implementation of PT at a national level and the potential value that PT offers to the learning community, as investigated in other contexts (Fougner, 2013). Additionally, while systematic PT can enhance student learning, more studies should examine the socio-emotional benefits of PT especially for students with SpLD. More studies should examine the influence of the physical environment and educational resources on the engagement of SEN students within PT activities, and examine the viability of enhancing PT implementation within inclusive settings through support from SEN supervisors and collaboration between mainstream and SEN teachers. Future research could also investigate ways to foster greater student autonomy in PT, improve the training of tutors and tutees, widen the applicability and enable more effective generalisation of this educational strategy.

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Appendices

Appendix 1: Data Collection Tools

Semi-structured Interview Schedule

Teacher Interview Schedule

School number: _____

Teacher number: _____

General information about the teacher:

❖ What is your age group?

20 - 29 ☐

30 - 39 ☐

40 - 49 ☐

50 - 59 ☐

❖ How long have you been a teacher?

Less than 5 years ☐

5 - 10 ☐

10 - 15 ☐

More than 15 ☐

❖ How long have you been teaching in this school?

❖ How long have you been implementing peer tutoring?

Dimensions of the interview

- Understanding of peer tutoring
- Implementation of peer tutoring
- Perceptions about the effectiveness of peer tutoring
- Perceptions about the factors that facilitate or hinder the use of peer tutoring
- Suggestions to improve the current implementation of peer tutoring

- Understanding of peer tutoring

Q1: What do you understand by the term peer tutoring?

Q2: What do you see as the purpose of peer tutoring?

Q3: How do you describe the role of peer tutoring to support students with SpLD?

Q4: How important do you think peer tutoring is for SpLD students? And why?

(1=Very important, 2= Quite important, 3=Neutral, 4=Not very important 5=not at all important)

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

- Implementation of peer tutoring

Q5: How often do you use peer tutoring compared to other teaching methods? Why?

Q6: Do you have guidelines for the implementation of the peer tutoring with SpLD students? Please explain?

Q7: How do you select students (tutors/ tutees) to take part in peer tutoring sessions? What criteria, if any, do you follow for the selection of students? Why?

Q8: How do you prepare the students (tutors and tutees) for the peer tutoring sessions? What parameters do you cover in training students for the purpose of peer tutoring?

Q9: In which subjects/skills have you used peer tutoring to support students with SLD? Why you choose these particular subjects/skills?

Q10: Can you describe the role of students (tutors/tutees) in peer tutoring sessions?

Q11: Can you describe your role before/during/after peer tutoring sessions? Can you give some examples? (Prompts: planning-pairing-training/observing-guiding-explaining- correcting/meeting-evaluating-providing feedback).

- Perceptions about the effectiveness of peer tutoring

Q12: From your observation, how would you rate the effectiveness of peer tutoring on the following aspects for students with SLD? [1= Very effective, 2= effective, 3= Neutral/neither effective nor ineffective, 4= Not very much, 5= Not at all]

Improving academic skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving social/ interpersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving emotional/ intrapersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving students' confidence 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' motivation 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' engagement 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Fostering inclusion/ sense of unity 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of what types of skills? How (examples)?
And why?

Q13: From your observations, are there any, other, effects of peer tutoring (such as: promoting positive attitudes towards the school) on SLD students? Can you explain?

Q14: Can you give examples of success stories of SLD students, who have been able to progress (academically-socially-emotionally...etc) because of peer tutoring?

-Perception about the factors that facilitate or hinder the use of peer tutoring

Q15: To what extent do the following factors facilitate/ hinder your implementation of peer tutoring? [1= Largely facilitate, 2= Facilitate, 3= Neutral, 4= Largely hinder, 5= Hinder]

Special education supervisor's support 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

School/admission support 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Staff collaboration 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Peer relationships 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Planning for peer tutoring sessions 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Mentoring students 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Time 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Scheduling issues 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students training 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' training 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of how (describe- examples)? And why?

Q16: To what extent do you think students (tutors) in your school are trained properly to teach SLD students? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5: Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q17: To what extent do you think students (tutees) in your school are trained properly to be taught by their peers? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5: Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q18: To what extent do you think you are trained properly to implement peer tutoring? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5= Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q19: What types of training have you received? Can you explain?

Q20: What skills are required from teachers to implement peer tutoring for supporting SLD students?

Q21: What additional sources support do you need to implement peer tutoring (such as: teaching aids and available places for training and meeting students)?

Q22: Can you identify other barriers that may hinder your implementation of peer tutoring with this target group (SLD students)? Can you give some examples?

Q23: Can you suggest some possible solutions that might overcome these barriers?

- Suggestions to improve the current implementation of peer tutoring

Q24: What suggestions would you like to make to improve your current practices of peer tutoring? And why?

Semi-structured Interview Schedule

Supervisor Interview Schedule

Educational administration: _____

Supervisor number: _____

General information about the supervisor:

❖ What is your age group?

20 - 29 ☐

30 - 39 ☐

40 - 49 ☐

50 - 59 ☐

❖ How long have you been a special education supervisor?

Less than 5 years ☐

5 - 10 ☐

10 - 15 ☐

More than 15 ☐

❖ How many schools do you have under your supervision?

❖ How many times do you usually visit schools?

Weekly ☐

Twice a month ☐

Monthly ☐

More ☐ please specify:

❖ How often do you observe teachers' current implementation of peer tutoring?

Dimensions of the interview

- Understanding of peer tutoring
- Peer tutoring policy
- Perceptions about the effectiveness of peer tutoring
- Perception about the factors that facilitate or hinder the use of peer tutoring
- Suggestions to improve the current implementation of peer tutoring

- Understanding of peer tutoring

Q1: What do you understand by the term peer tutoring?

Q2: What do you see as the purpose of peer tutoring?

Q3: How do you describe the role of peer tutoring to support students with SpLD?

Q4: How important do you think peer tutoring is for SpLD students? And why?

(1=very important, 2=quite important, 3=neutral, 4=not very important 5=not at all important)

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

- **Peer tutoring policy**

Q5: What policy/guideline do you have for peer tutoring?

Q6: How do you transfer this policy/ guideline into practice?

Q7: Do you have any assistance (Such as: the Ministry of Education) for transferring the policy/ guideline?

Q8: What ideas for peer tutoring are you developing at present?

- **Perceptions about the effectiveness of peer tutoring**

Q9: From your observation, how would you rate the effectiveness of peer tutoring on the following aspects for students with SLD? [1= Very effective, 2= effective, 3= Neutral/neither effective nor ineffective, 4= Not very much, 5= Not at all]

Improving academic skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving social/ interpersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving emotional/ intrapersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving students' confidence 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' motivation 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' engagement 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Fostering inclusion/ sense of unity 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of what types of skills? How (examples)?

And why?

Q10: From your observations, are there any, other, effects of peer tutoring (such as: promoting positive attitudes towards the school) on SLD students? Can you explain?

Q11: Can you give examples of success stories of SLD students, who have been able to progress (academically-socially-emotionally...etc) because of peer tutoring?

-Perception about the factors that facilitate or hinder the use of peer tutoring

Q12: To what extent do the following factors facilitate/ hinder your implementation of peer tutoring? [1= Largely facilitate, 2= Facilitate, 3= Neutral, 4= Largely hinder, 5= Hinder]

Special education supervisor's support 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

School/admission support 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Staff collaboration 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Peer relationships 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Planning for peer tutoring sessions 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Mentoring students 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Time 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Scheduling issues 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students training 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' training 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of how (describe- examples)? And why?

Q13: To what extent do you think students are trained properly to teach SLD students? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5: Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q14: To what extent do you think you teachers are trained properly to implement peer tutoring? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5= Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q15: What skills are required from teachers to implement peer tutoring for supporting SLD students?

Q16: What additional sources support do teachers need to implement peer tutoring (such as: teaching aids and available places for training and meeting students)?

Q17: Can you identify other barriers that may hinder the implementation of peer tutoring with this target group (SLD students)? Can you give some examples?

Q18: Can you suggest some possible solutions that might overcome these barriers?

- Suggestions to improve the current implementation of peer tutoring

Q19: What is your opinion about the current peer tutoring implementation?

Q20: What suggestions would you like to make to improve your current practices of peer tutoring? And why?

Semi-structured Interview Schedule

Tutor and tutees Interview Schedule

The interview will start by asking the students general questions about their name, age and class to establish a friendly relationship with the students and encourage them to talk. During the interview, the students will be asked simple questions to express their views about peer tutoring by reflecting upon her experience. The following questions will be asked to all students in a friendly way and they will be simplified if necessary to suit students' understanding.

School number: _____

Tutor/tutee number: _____

General information about the tutor/tutee:

- ❖ What class are you in?
- ❖ How long have you been involved in peer tutoring?

As tutor: Less than 6 months ☐ Less than 1 year ☐ Less than 2 years ☐
Less than 3 years ☐

As tutee: Less than 6 months ☐ Less than 1 year ☐ Less than 2 years ☐
Less than 3 years ☐

Dimensions of the interview

- Understanding of peer tutoring
- Implementation of peer tutoring
- Perceptions about the effectiveness of peer tutoring
- Perception about the factors that facilitate or hinder the use of peer tutoring

- Understanding of peer tutoring

Q1: What do you understand by the term peer tutoring?

Q2: What do you see as the purpose of peer tutoring?

Q3: How important do you think peer tutoring is for SpLD students? And why?

(1=very important, 2=quite important, 3=neutral, 4=not very important 5=not at all important)

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

- Implementation of peer tutoring

Q4: How have you prepared to participate in peer tutoring sessions?

Q5: In which subjects/skills have you been involved in peer tutoring?

Q6: Can you describe your role of in peer tutoring sessions?

- Perceptions about the effectiveness of peer tutoring

Q7: From your participation, how would you rate the effectiveness of peer tutoring on the following aspects for students with SLD? [1= Very effective, 2= effective, 3= Neutral/neither effective nor ineffective, 4= Not very much, 5= Not at all]

Improving academic skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving social/ interpersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving emotional/ intrapersonal skills 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Improving students' confidence 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' motivation 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Increasing students' engagement 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Fostering inclusion/ sense of unity 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of what types of skills? How (examples)?

And why?

Q8: From your participation, are there any, other, effects of peer tutoring (such as: promoting positive attitudes towards the school) on SLD students? Can you explain?

-Perception about the factors that facilitate or hinder the use of peer tutoring

Q9: To what extent do the following factors facilitate/ hinder your implementation of peer tutoring? [1= Largely facilitate, 2= Facilitate, 3= Neutral, 4= Largely hinder, 5= Hinder]

School/admission support 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students' attitudes 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Peer relationships 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Mentoring students 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Time 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Scheduling issues

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Students training

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Teachers' training

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Following the previous items with questions of how (describe- examples)? And why?

Q10: To what extent you are trained properly to teach SLD students? [1= Fully trained, 2= Quiet trained, 3= Neutral, 4= Not very well trained, 5: Not at all]

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Q11: What additional sources of support do you need to participate peer tutoring (such as: teaching aids and available places for training and meeting students)?

Q12: Can you identify other barriers that may hinder you from participating in peer tutoring?

Q13: Can you suggest some possible solutions that might overcome these barriers?

OBSERVATION SHEET
(Implementation of peer tutoring)

Observation date:

Location:

Subject:

Time started:

Time ended:

Total minutes:

*** Section One: General Information**

Participants	Notes
Teacher	
Tutor	Class: General Characteristics:
Tutee	Class: General Characteristics:

- What are the lesson aims?
- What the physical environment look like? (Lightening- desk arrangement- noise level- unexpected interruptions)

*** Section Two: Before the lesson**

- Teacher

Aspect	Type	Notes
Introduction	Having a seating plan of the classroom	
	Introducing the lesson and its aims	
	Ensuring that students know the lesson' aims	
	Linking new subject matter to prior learning and/or experience	

	Ensuring that students know their roles and responsibilities during the session	
	Others:	

*** Section Three: During the lesson**

- Tutor

Aspect	Type	Frequently (if applicable)	Notes
Instruction practices	Coaching		
	Modelling		
	Discussion		
	Testing/questioning		
	Direct Instructions		
	Providing Practice Opportunities		
	Others:		
Teaching aids (tools) used	ICT devices and software		
	Real- world objects		
	Worksheets		
	Textbooks		
	Others:		
Mastery of content	Able to explain /answer the questions		
	Unable to explain/ answer the questions		
Engagement : fully engaged (active)	Teaching tutee/explaining/discussing		
	Asking questions		
	Providing feedback		
	Answering questions		
	Encouraging participation		
	Socializing with tutee		
Engagement : fully engaged (passive)	Supervising tutee as she work		
	Listening to tutee		
No engagement	No involvement in learning activity		
Motivation	Interest and comfort in the tutoring activity		
	Seriousness and enthusiasm in helping her peer		

Social/ interpersonal skills	Talk in a friendly, courteous and respectful manner to her peer		
	Providing sufficient time for her peer to answer		
	Ability to maintain eye contact		
	Resolving conflicts		
	Demonstrating empathy		
	Communicating easily		
	Others:		
Emotional/ intrapersonal skills	Managing her feelings of frustration and disappointment		
	Able to stay calm and balanced in stressful situations		
	Others:		
Inappropriate behaviour	Interrupting her peer while talking		
	aggressive communications		
	Others:		
Assessment	Written questions		
	Oral questions		
	Others:		
Reinforcement	Verbal		
	Non-verbal		
Challenges	Difficulty in communicating and interacting with the tutee		
	Confusing in her roles and responsibilities		
	Others:		
Others:			

- Tutee

Aspect	Type	Frequently (if applicable)	Notes
level of student work (Sign of	Recalling information (knowledge)		

understanding and learning)	Understanding information (comprehension)		
	Using information in a new way (apply)		
	Breaking down information into parts (analysis)		
	Putting information together in new ways (Synthesis)		
	Making judgments and justifying positions (Evaluate)		
	Others:		
Engagement : fully engaged (active)	Practicing (reading-writing ...)		
	Asking questions		
	Answering questions		
	Socializing with tutor		
Engagement : fully engaged (passive)	Listening to tutor		
No engagement	No involvement in learning activity		
Motivation	Interest and comfort in the tutoring activity		
	Seriousness in helping her self		
Social/ interpersonal skills	Talk in a friendly, courteous, and respectful, manner to children		
	Following tutor's instructions		
	Ability to maintain eye contact		
	Resolving conflicts		
	Demonstrating empathy		
	Communicating easily		
	Others:		
Emotional/ intrapersonal skills	Managing her feelings of frustration and disappointment		
	Able to stay calm and balanced in stressful situations		
	Others:		

Inappropriate Behaviours	Refusing to answer the questions		
	aggressive communications		
	Others:		
Challenges	Difficulty in communicating and interacting with the tutor		
	Confusing in her roles and responsibilities		
	Others:		
Others:			

- Teacher

Aspect	Type	Frequently (if necessary)	Notes
Mentoring	Checking students' progress		
	Model and encourage positive interactions between peers		
	Provide situations in which students are encouraged to take turns, listen to one another, and share materials		
	Managing students' roles		
	Establishing positive relationships and promotes interaction among peers		
	Managing lesson time		
	facilitating active participation		
	correcting tutors' mistakes		
	Providing continuous feedback		

Challenges	Difficulties in managing the lesson		
	Lack of time		
	Lack of materials		
	Others:		
Others:			

- Tutoring

Aspect	Notes
Type of tutoring (class-wide/same age/cross-age)(reciprocal/nonreciprocal)	
Positive effects of peer tutoring on SpLD student as observed (Academic/Social/Emotional...)	
Negative effects of peer tutoring on SpLD student as observed (Academic/Social/Emotional...)	
Others:	

*** Section Four: After the lesson**

- Teacher

Aspect	Type	Notes
Evaluation and feedback	Keeping records of tutor's performance	
	Keeping records of tutee's progress	
	Discussion with students and providing feedback related to their level of cooperation, the quality of their talk and any specific issues	
	Discussing students concerns	
	Supporting students and providing advices	
	others:	

*** General Comments:**

.....

OBSERVATION SHEET
(Teacher plans for peer tutoring sessions)

Aspect	Notes
Subject	
Lesson objectives	
Teaching aids/learning materials	
Lesson procedure (tutor roles)	
Lesson procedure (tutees roles)	
Assessment and homework	
Pairing schedule and criteria	
Training procedure and criteria	
Others:	

Appendix 2: Ethical Approvals for Conducting the Research

Ethical approval from University of Warwick

Application for Ethical Approval for Research Degrees

(MA by research, MPhil/PhD, EdD)



Student number:

1466313

Student name:

Afnan Almulla

PhD ☒ EdD ☐ MA by research ☐

Project title:

Peer Tutoring and Learning Experiences of Students with Specific Learning Difficulties: A Case Study of Selected Schools in Saudi Arabia

Supervisor:

Dr. Dimitra Hartas

Funding body (if relevant):

N/A

Please ensure you have read the Guidance for the Ethical Conduct of Research available in the handbook.

Methodology

Please outline the methodology, e.g. observation, individual interviews, focus groups, group testing etc.

- This will be case study research, conducted through the use of three methods: semi-structured interviews (Individual, face-to-face), observation and document analysis.

Participants

Please specify all participants in the research including ages of children and young people where appropriate. Also specify if any participants are vulnerable e.g. children; as a result of learning disability.

- The participants will be drawn from four secondary schools for females in Saudi Arabia and will include eighteen students (aged 12-15), both with and without specific learning difficulties such as dyslexia and dyscalculia; four special education needs teachers; and eight special education needs supervisors.

Respect for participants' rights and dignity

How will the fundamental rights and dignity of participants be respected, e.g. confidentiality, respect of cultural and religious values?

- The cultural and religious values of the participants will certainly be respected in my research because I am a Saudi researcher and am fully aware of the traditions, language and beliefs of the Saudi people. I also have experience as a special education needs teacher in various Saudi schools and this has improved my understanding of the characteristics of students with various learning difficulties as well as ways to communicate with these students. As a female researcher, I will dress according to the conventions of the female Saudi schools.
- During the interviews, I will focus on simply asking the questions and then on listening and recording participants' answers without presenting my personal feelings or judging their responses in any way. Participants will also have the right to withdraw for any reason and at any stage of the research project.

Privacy and confidentiality

How will confidentiality be assured? Please address all aspects of research including protection of data records, thesis, reports/papers that might arise from the study.

- It is difficult to guarantee that the research will be fully confidential because of the importance of reporting the findings in my thesis. Yet, my role will be to ensure that all participants' names will remain anonymous (including the names of schools)

and that they will not be identifiable as codes and pseudonyms will be used. The codes will be stored in a password-protected folder on my personal laptop, separate from the interview transcripts.

- All the data will also be stored electronically on my computer, which will also be protected by a password. Any hard copies, such as my notes, will be kept in my office in a locked cabinet, and they will be destroyed on completion of the project.

Consent

How will prior informed consent be obtained from the following?

From participants:

- All participants will receive a letter of consent form setting out the purposes of the study and their role in informing the research. They will also be asked to tick a number of boxes indicating whether or not they understand that their participation is voluntary and that they have the right to any further clarification required. Participants' agreement to participate in the study will be confirmed by their signature on the consent form. I will then collect the forms individually from the participants to discuss any outstanding concerns.
- Informed consent will also be obtained from parents who will be asked to sign a copy of the consent form. These forms will be collected from the school administration. However, in some cases, oral permission might also be obtained from parents via a phone-call if they require additional information from the researcher. The same will apply to students in addition to the face-to-face meeting to explain the aims of the study and to encourage them to ask for any clarification needed before deciding to participate in the study.

From others:

- While initial consent has been gained from the Ministry of Education in Saudi Arabia, official and written permission will be obtained after submitting a letter that demonstrates the purpose of the study and the names of participating schools.

If prior informed consent is not to be obtained, give reason:

- N/A

Will participants be explicitly informed of the student's status?

- Yes, my name, email and the name of my university (to which the research belongs) will be explicitly written on the consent forms that will be sent to teachers, supervisors and parents. I will also introduce myself to the students prior to the start of the data collection procedure.

Competence

How will you ensure that all methods used are undertaken with the necessary competence?

- First, I had experience in conducting interviews during my previous studies with small scale projects and for an MA dissertation, which have all contributed to my being familiar with this method.

- Second, I have attended Advanced Research Methods sessions as part of my PhD programme, which has improved my knowledge of the skills required for observation and document analysis.

- Third, I have been reading many books and articles on educational research methods in preparation for my paper, and these have enhanced my understanding

of the principles, types, advantages, disadvantages and skills required for collecting data via interviews, observation and document analysis.

- Fourth, I conducted interviews with three Saudi teachers during the pilot stage, which helped me to think about how to overcome the challenges that I might face during the interviews. For example, I realised the importance of allowing teachers to comment on the interview transcripts, especially when they were not happy to have their voices recorded. Their comments will enhance the data gathering process and will help me to complete any missing answers. I will also get further practice with the method with my family and friends and I will seek advice from my supervisor.

Protection of participants

How will participants' safety and well-being be safeguarded?

- As a researcher who has specialised in special education, I can understand that some students with specific learning difficulties might feel uncomfortable with the questions that have a direct interface with their academic and social difficulties. Thus, I will be very sensitive when asking these questions and will remind the participants of their right to skip any questions or even to withdraw from the interview.
- All interviews will be conducted in the school environment in a location that is accessible to all staff to help the participants to trust that the researcher does not intend to cause any physical or psychological harm.

Child protection

Will a CRB check be needed? Yes ☐ No ☒ (If yes, please attach a copy.)

Addressing dilemmas

Even well planned research can produce ethical dilemmas. How will you address any ethical dilemmas that may arise in your research?

- Despite careful consideration for the participants' rights, the main ethical dilemma that I am expecting to encounter is parents disagreeing with their children's participation in the study, or participants' withdrawal, especially at a late stage of the research. Hence, I will negotiate access (with the Ministry of Education in Saudi Arabia) to more than the number of schools required by this study so I can avoid any waste of time that might occur as a result of this eventuality.

- If I encounter other serious ethical dilemmas, such as reporting discrimination against students with specific learning difficulties, I will first consult with the British Educational Research Association (BERA). If I cannot find a solution, I will seek advice from my colleagues and my supervisor.

Misuse of research

How will you seek to ensure that the research and the evidence resulting from it are not misused?

- As discussed above, all data will be stored securely on my personal laptop and in my office; these will be locked and the information used only for the purposes of this study.

- Participants will have a second opportunity to review the findings after the analysis stage to ensure that the analyses and discussion accurately reflect the actual data.
- All data will be reported without revealing the identity of the participants by using codes or pseudonyms, and hard copy data will be shredded at the end of the research.

Support for research participants

What action is proposed if sensitive issues are raised or a participant becomes upset?

- I will start by speaking to the participant and trying to understand the reason for her discomfort. If, for example, she becomes upset because of a question raised during the interview, I will immediately skip the question or even rearrange the interview for another time if signs of discomfort remain. Additionally, I will keep reminding the participants that they will have the final say as to which information will be reported.
- Because of my duty to respect the schools' policies, any sensitive issues that may arise from the students will be treated by requesting the assistance of the head teacher or school principal.

Integrity

How will you ensure that your research and its reporting are honest, fair and respectful to others?

- Understanding the principles of research, choosing an appropriate methodology, and using different types of data collecting methods will increase the trustworthiness of my study. These have been widely reviewed and amended with the assistance my supervisor.

- The importance of cross-checking the data during the analysis stage is strongly emphasised to ensure that the researcher has made accurate interpretations, and this can be achieved with the assistance of the study participants.
- It is also essential to avoid any information that can lead to the identification of the participants. In this way their privacy and anonymity will be respected.
- The researcher is also required to avoid any potential bias by as far as possible considering other perspectives and by being willing to report any findings that might not be in line with the researcher's own beliefs.

What agreement has been made for the attribution of authorship by yourself and your supervisor(s) of any reports or publications?


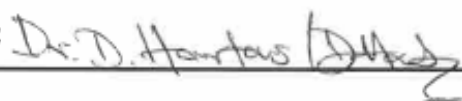
- With regard to my thesis, all support and guidance from my supervisor will be acknowledged. The same will apply to other publications, in addition to my acknowledging any minor or significant contributions from other authors as may be appropriate.

Other issues

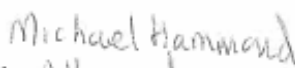

Please specify other issues not discussed above, if any, and how you will address them.

- Although I will build rapport with the participants and a sense of trust between us, there are cultural considerations that may weigh against allowing recordings to be made. Hence, I will always seek approval from the participants prior to recording their voices, and if cannot, I will then take written notes of their answers and get back to them after the interviews to check their answers and obtain any missing data.
- The social stigma that parents of children with disabilities may experience may disincline them toward allow their children to participate. I will attempt to lessen the sense of stigma by contacting parents to explain the aim of the study, which

focuses on investigating peer tutoring as a teaching method that has the potential to support the learning experiences of their children. A copy of the interview questions will also be sent to the parents, providing them with an opportunity to eliminate any questions they do not want to be asked to their children. Additionally, because parents may trust the school administration more than an unknown researcher, I may ask the administration to send an official letter to parents, asserting that students' names will remain anonymous and will not be identified in the study.

Signed:	
Student: 	Date: 28/10/2015
Supervisor: 	Date: 30/10/15

Please submit this form to the Research Office (Andy Brierley, room WE133)

Office use only
Action taken:
<input checked="" type="checkbox"/> Approved
<input type="checkbox"/> Approved with modification or conditions – see below
<input type="checkbox"/> Action deferred. Please supply additional information or clarification – see below
Name: 
Signature: 
Date:
Stamped:
Notes of Action:

الموضوع : الموافقة على تطبيق أدوات الدراسة في مدارس تابعة لإدارة التعليم بمنطقة الرياض

أفنان بنت عبد الرحمن الملا	اسم الباحثة/ة
جامعة وريك في بريطانيا	الكلية / الجامعة
متطلب للحصول على درجة الدكتوراه	الغرض من الدراسة
مدارس تابعة لإدارة تعليم منطقة الرياض – العينة معلمات ومشرفات تربويات	مجال الدراسة والعينة

سعادة الملحق الثقافي بسفارة المملكة العربية السعودية في / لندن

السلام عليكم ورحمة الله وبركاته

شاكرين طيب تعاونكم ،،،،،

نوفمبر ١٩١٧



ص / للجامعة
ص / قسم الدراسات والبحوث
ن / الصالح

صفحة 15 من 18 تاريخ الإصدار : 1436/8/5 هـ الإصدار : 1.0 رمز العملية ت ط ع

الرقم : ٣٧٧١٩-٢١
التاريخ : ١٨/٤/١٤٣٧ هـ
المرفقات : -



المملكة العربية السعودية
وزارة التعليم
(٢٨٠)
الإدارة العامة للتعليم بالمنطقة الشرقية
إدارة التخطيط والتطوير

الرؤية: الريادة لبناء جيل مبدع	الرسالة: تقديم خدمات تربوية وتعليمية ذات جودة عالية وفق معايير عالمية بمشاركة مجتمعية	القيم: المواطنة- الإلتقان- العدل- العمل بروح الفريق- التنمية الذاتية- المسؤولية الإجتماعية
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الى : المكرمين / مديري و مديرات مكاتب التعليم بالمنطقة الشرقية
من : مديرة إدارة التخطيط والتطوير
بشأن: تسهيل مهمة الباحثة / أفنان الملا

السلام عليكم ورحمة الله وبركاته ، ، ،

بناءً على موافقتنا بشأن تسهيل مهمة الباحثة أفنان بنت عبد الرحمن الملا ، طالبة الدراسات العليا لمرحلة الدكتوراه بجامعة وريك في بريطانيا، والتي تجري بحثاً بعنوان (تحقيق حول استراتيجية تدريس الأقران و الخبرات التعليمية للطلالبات ذوات صعوبات التعلم)، حيث يتطلب البحث تطبيق مقابلة و ملاحظة على عينة من المشرفات التربويات لصعوبات التعلم ومعلمات و طالبات صعوبات التعلم .
عليه فلا مانع من تسهيل مهمتها ، علماً أن التطبيق سيكون من قبل الباحثة وفق اللوائح و الأنظمة خلال سنة من تاريخه .

يسعدني شكركم على عنايتكم وتجاوبكم مع ظروف الباحثة
والسلام عليكم ورحمة الله وبركاته ، ، ،

نوال بنت عبد الرحمن التيسان

٢١/٨

م/الجدير
١٨/٤/١٤٣٧ هـ



" إفادة "

الموضوع : انتهاء مهمة بحثية

أفنان بنت عبدالرحمن الملا	اسم الباحث/ة
جامعة الدمام - جامعة وريك - بريطانيا	الكلية / الجامعة
متطلب للحصول على درجة / الدكتوراه	الغرض من الدراسة
مدارس تابعة لإدارة التعليم بمنطقة الرياض - عينة الدراسة طالبات و معلمات ومشرفات تربويات	مجال الدراسة والعينة

حفظها الله

سعادة الملحق الثقافي السعودي في / لندن

السلام عليكم ورحمة الله وبركاته وبعد ،،،

بناءً على تعميم معالي وزير التعليم رقم 55/610 وتاريخ 1416/9/17هـ بشأن تفويض الإدارات العامة للتعليم بإصدار خطابات السماح للباحثين بإجراء البحوث والدراسات ، وبناءً على تفويض مدير عام التعليم إدارة التخطيط والتطوير في الخطاب ذي الرقم 11/33674823 والتاريخ 1433/4/14هـ بشأن تسهيل مهام الباحثين والباحثات ، وحيث تقدمت إلينا الباحثة (الموضحة بياناتها أعلاه) بطلب إجراء دراستها والتي بدأت من تاريخ 1437/4/17هـ إلى تاريخ 1437/7/11هـ ، و عليه نفيديكم أن الباحثة قد أنهت كافة إجراءات الدراسة وتطبيق الأدوات في مجال البحث على العينة المحدد أعلاه (مرفق لكم إفادة من جهات التطبيق في المدارس الحكومية المتوسطة والثانوية) في جهات تابعة لإدارة التعليم في منطقة الرياض التعليمية ، وبناءً على طلبها تم منحها الإفادة .

شاكرين طيب تعاونكم ،،،،،،،،

مدير إدارة التخطيط والتطوير



نوفع الجهاد
v/ii

ص / للملحقة
ص / قسم الدراسات والبحوث
ن/ الصالح

رمز العملية ت ط ع

الإصدار : 1.0

تاريخ الإصدار : 1436/8/5هـ

صفحة 14 من 18

Teacher Consent form

Peer Tutoring and Learning Experiences of Students with Specific Learning Difficulties: A Case Study of Middle Schools in Saudi Arabia

Dear teacher,

My name is Afnan Almulla, a PhD student of the University of Warwick in the UK. I am researching the implementation of peer tutoring in supporting SpLD students. The use of peer tutoring has been perceived as an effective method among many educators. The purpose of this study is to find out teachers', students' and supervisors' perceptions of the effectiveness of peer tutoring to support students with specific learning difficulties in Saudi Arabia. The significant of this study is that it can inform improvements in peer tutoring in Saudi schools and your involvement in this research will help to gain a deeper understanding of the implementation of peer tutoring in Saudi schools. If you are willing to participate in this study, you will be invited to take part in around 30 minute interview. I would like to confirm that your participation is totally voluntary and you have the right to withdraw at any time. Your name and the name of the school will also remain anonymous and all data will be used for the purpose of this study. If you agree to take part in this study please answer the below questions and sign.

*** Please select one answer for each statement:**

1- I am aware of the aim of this study and have had the opportunity to ask questions about the nature of the research:

Yes ☐ No ☐

2- I understand that my participation is voluntary and I can withdraw at any time:

Yes ☐ No ☐

3- I realise that my name and the name of school will remain anonymous and all data will be used for the purpose of this research:

Yes ☐ No ☐

4- I agree to participate in this research :

Yes ☐ No ☐

Name of teacher:

Email:

Mobile Phone:

Name of school:

Signature:

Date:

The researcher /

Name: Afnan Almulla

Email: A.Almulla@warwick.ac.uk

Place of study: University of Warwick

Supervisor Consent form

Peer Tutoring and Learning Experiences of Students with Specific Learning Difficulties: A Case Study of Middle Schools in Saudi Arabia

Dear supervisor,

My name is Afnan Almulla, a PhD student of the University of Warwick in the UK. I am researching the implementation of peer tutoring in supporting SpLD students. The use of peer tutoring has been perceived as an effective method among many educators. The purpose of this study is to find out teachers', students' and supervisors' perceptions of the effectiveness of peer tutoring to support students with specific learning difficulties in Saudi Arabia. The significant of this study is that it can inform improvements in peer tutoring in Saudi schools and your involvement in this research will help to gain a deeper understanding of the implementation of peer tutoring in Saudi schools. If you are willing to participate in this study, you will be invited to take part in around 30 minute interview. I would like to confirm that your participation is totally voluntary and you have the right to withdraw at any time. Your name and the name of educational administration will also remain anonymous and all data will be used for the purpose of this study. If you agree to take part in this study please answer the below questions and sign.

*** Please select one answer for each statement:**

1- I am aware of the aim of this study and have had the opportunity to ask questions about the nature of the research:

Yes ☐ No ☐

2- I understand that my participation is voluntary and I can withdraw at any time:

Yes ☐ No ☐

3- I realise that my name and the name of educational administration will remain anonymous and all data will be used for the purpose of this research:

Yes ☐ No ☐

4- I agree to participate in this research :

Yes ☐ No ☐

Name of supervisor:

Email:

Mobile Phone:

Educational administration:

Signature:

Date:

The researcher /

Name: Afnan Almulla

Email: A.Almulla@warwick.ac.uk

Place of study: University of Warwick

Parent Consent form

Peer Tutoring and Learning Experiences of Students with Specific Learning Difficulties: A Case Study of Middle Schools in Saudi Arabia

Dear parents,

My name is Afnan Almulla, a PhD student of the University of Warwick in the UK. I am researching the implementation of peer tutoring in supporting SpLD students. The use of peer tutoring has been perceived as an effective method among many educators. The purpose of this study is to find out teachers', students' and supervisors' perceptions of the effectiveness of peer tutoring to support students with specific learning difficulties in Saudi Arabia. The significant of this study is that it can inform improvements in peer tutoring in Saudi schools and your child involvement in this research will help to gain a deeper understanding of the implementation of peer tutoring in Saudi schools. Your child's perceptions are vital. If you agree for your child to participate in this study, she will be invited to take part in around 30 minute interview. I would like to confirm that her participation is totally voluntary and you have the right to withdraw your child from the study at any time. Your child name and the name of the school will also remain anonymous and all data will be used for the purpose of this study. If you agree for your child to take part in this study please answer the below questions and sign.

*** Please select one answer for each statement:**

1- I am aware of the aim of this study and have had the opportunity to ask questions about the nature of the research:

Yes ☐ No ☐

2- I understand that my child participation is voluntary and I can withdraw her at any time:

Yes ☐ No ☐

3- I realise that my child name and the name of school will remain anonymous and all data will be used for the purpose of this research:

Yes ☐ No ☐

4- I agree to participate in this research :

Yes ☐ No ☐

Name of parent:

Name of student:

Signature:

Date:

The researcher /

Name: Afnan Almulla

Email: A.Almulla@warwick.ac.uk

Place of study: University of Warwick

Student Consent form

Peer Tutoring and Learning Experiences of Students with Specific Learning Difficulties: A Case Study of Middle Schools in Saudi Arabia

Dear student,

My name is Afnan Almulla, a PhD student of the University of Warwick in the UK. I am researching the implementation of peer tutoring in supporting SpLD students. The use of peer tutoring has been perceived as an effective method among many educators. The purpose of this study is to find out teachers', students' and supervisors' perceptions of the effectiveness of peer tutoring to support students with specific learning difficulties in Saudi Arabia. The significant of this study is that it can inform improvements in peer tutoring in Saudi schools and your child involvement in this research will help to gain a deeper understanding of the implementation of peer tutoring in Saudi schools. Your perceptions are vital. If you agree for to participate in this study, you will be invited to take part in around 30 minute interview. I would like to confirm that your participation is totally voluntary and you have the right to withdraw your child from the study at any time. Your name and the name of the school will also remain anonymous and all data will be used for the purpose of this study. If you agree to take part in this study please answer the below questions and sign.

*** Please select one answer for each statement:**

1- I am aware of the aim of this study and have had the opportunity to ask questions about the nature of the research:

Yes ☐ No ☐

2- I understand that my child participation is voluntary and I can withdraw her at any time:

Yes ☐ No ☐

3- I realise that my child name and the name of school will remain anonymous and all data will be used for the purpose of this research:

Yes ☐ No ☐

4- I agree to participate in this research :

Yes ☐ No ☐

Name of student:

Signature:

Date:

The researcher /

Name: Afnan Almulla

Email: A.Almulla@warwick.ac.uk

Place of study: University of Warwick

Appendix 3: Example of Data Analysis Procedure

Extracts from a teacher interview (S2ST6)

* First Stage: Deductive Analysis

1- Reading the interview transcript several times and taking notes as appropriate.

2- Colouring and coding the answers based on a list of some pre-determined themes, as in the following example:

List of some pre-determined themes for the third research question:

Research Question	Pre-determined themes	Codes
How is peer tutoring perceived and used to support students with SpLD within the cultural and religious framework of Saudi Arabian middle schools?	Understanding peer tutoring	(Presented in brackets within the text)
	Criteria for choosing peers	
	Training	
	Division of labour	
	Policies and guidelines	

Interview transcript:

Q: What do you understand by the term peer tutoring?

I can say that it means an exchange of information between two students who are close in age ranges or an exchange of experiences, even if the tutor is studying in a learning stage that is above the tutee (*Exchanging knowledge and experiences*). I can say in general that it means an exchange of experiences between two students who are close in age range (*Age criteria*).

Q: What do you see as the purpose of peer tutoring?

I do not see that it has academic purpose only, I see that it has many purposes. It touches on the psychological aspect of humans in general (*Academic and social aims*) because the student is taught by a person who is close to her in age, meaning that they share common characteristics (*Age criteria*) (*Common characteristics*). For example I always tell my daughters that I can understand the information from a friend more than someone further from me; say if I discuss a topic with my mother, I might not understand it clearly from her comparing with my older sister. My mother might explain the topic for me in a rigorous way or something like that, but when my older sister comes to me and tries to explain what my mother wanted to say, explaining that our mother means this and this and this, I can understand the topic more clearly. So, what I wanted to say to my daughter is that the same topic can be understood differently by a person who explained it to me in a different manner (*Academic aims*).

>>> So do you think that peer tutoring can have social purposes?

It has social, psychological and age purposes. I feel that it touches the human in many things and aspects; even sometimes it can touch the intellectual aspect because students are close in their thoughts (*Academic and social aims*). For instance, sometimes when you discuss an idea with somebody you might not accept what he said, but at the same time you can

accept the same idea from someone else because you feel that your mind and his mind are close, so the impact of one person on another person is something that I consider to be as a part of the meaning of peer tutoring. For example, I with my sisters, they are saying to me ‘you can influence Khalid more than us’. Maybe because we are very close, he is my younger brother. When we are talking and they want something, they ask me to tell Khalid myself. *I feel that sharing one thought can play a role (Common characteristics)*. This means that I cannot just bring any student and ask her to teach my student. *I have first to sit with my daughter [her student] and ask her which students you love in the class, which student makes you feel happy and comfortable when you talk with her (Positive attitude), because the aim is not just to bring any student to explain lessons (Academic aims)*. For example, I have one case [one student] who, from the beginning of this year, I have tried to convince to participate in this method, but she is not receptive – she does not accept being taught by one of her friends.

Q: How do you describe the role of peer tutoring to support students with SpLD?

Look, *peer tutoring strategy is one of the most wonderful strategies – in the learning process in general – to be used with students with learning difficulties, and even with mainstream students (Peer tutoring is for SEN and mainstream students)*. This strategy I feel, if implemented practically in a correct manner, will be really very beneficial. During your observations you will see the students and you will see *the differences between the tutors in terms of the style of their teaching: you will see a student who really plays the role of teacher in terms of how she teaches and how she presents the lesson (Playing the role of classroom teacher/more teacher-centered approach), and you will see another student who prefers to discuss with her friend in order to explain the lesson*, so peer tutoring can even present the

characteristics of students. It can present how students discuss and speak to each other, things that student might not be able to discuss with the classroom teacher or things which student might not be able to ask her teacher about (*Less formal teaching approach/ more student-centered approach*); these things can be discussed between students in a totally spontaneous way while they are talking and laughing. I feel that peer tutoring makes the learning process more beautiful, more simple – and best of all, it removes the barrier which exists between students and their teacher. A teacher delivers the information and students might not feel comfortable to ask for clarification (*Less restricted teaching environment*), especially with the large number of students which we have – the number of students is between 35 and 40 in each classroom, and the lesson time is just 45 minutes! How can we give each student what they deserve? This is the biggest thing that weighs mainstream teachers down. We also have many classes (*Tackling problems related to the large number of students*), so if we had 45 students in just two classes in grade eight this would be fine, but we actually have five classes in grade eight, another five classes in grade seven and another five classes in grade six, so this causes fatigue to the mainstream teacher. She can deliver the lesson and let's say 25% of the students (actually, to not do wrong, let's say 50% of the students) understood the lesson, so there is 50% left – including students with learning difficulties, and slow learners, and those with attention disorders, who need extra work from the teacher in order to help them focus on their tasks. So this is not a small percentage! The problem which we face that we do not just have students with learning difficulties, we also have slow learners, we have terrible percentages of careless and laziness, regrettably, and we also suffer from painfully low levels of motivation in older students. I notice that in the last four years of school, which makes you feel pain because students do not show any motivation to learn.

**Q: How important do you think peer tutoring is for SpLD students?
And why?**

(1=Very important, 2= Quite important, 3=Neutral, 4=Not very important 5=not at all important)

1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐

I consider peer tutoring as a very very important thing. For example, my daughters at home have a fairly large age gap: Mariam is five and a half and Suha is ten years old, so there are a few years between them – they are not 9 and 10 years old, no. But even though you cannot imagine why Mariam would be affected by Suha [...]. If I ask Mariam to wear something she refuses and wants to wear another thing, so I go to Suha and ask her to convince Mariam to wear what I want. Mariam always wants to wear the same clothes as her older sister! **So if the age gap between them was less, the impact would be greater** (*Age criteria*).

Q: How often do you use peer tutoring compared to other teaching methods? Why?

Not daily, I can say weekly, but not weekly – maybe once or twice a week [...]. In peer tutoring I can see the outcomes on my daughters [*she means her students*] myself during the lesson, for example when **I bring the students [tutor and tutee] here [learning resources room] or when the student deliver the lesson to her colleague, she brought to me the worksheet that they worked on and I can take a look at the worksheet and see the results. I can also see the small teacher's comments telling me that the student completed the worksheet alone** (*Monitoring students' work*). But

when we talk about other strategies, such as brainstorming, concept maps and note taking, yes they are all good strategies but they are not as easy to implement. Peer tutoring is easier because when humans receive information from a similar person or in the same age group it is easier for him, compared to when he tries to extract the information himself.

>>> So is peer tutoring easier for you to implement, comparing with other strategies?

It is not that much easier because its success depends on implementing it correctly. This means other strategies which we utilize, such as note taking or concept maps – they are not easy at all, they are difficult because they depend on the student practicing many times to summarize the information in a better way, and deducing the best information that should be included in the hierarchical map, so this is a bit difficult because maybe the student is able to summarize the information but does not know how to divide it correctly so an overlap in the information might occur. Sometimes what we do to help the student succeed in implementing this strategy is to draw the chart and ask the student to distribute the information, although even then the student can face difficulties. Distributing the information depends on visual memory and auditory memory, and students have to memorize the information and remember where they are in the chart. Our students have short memories – once they close the book they might forget the information. Yesterday we had a peer tutoring session for reciting three ayahs in Qur'an – only three ayahs [*similar to three sentences*] – and this took two lesson periods. The student has difficulty in pronunciation and difficulty in memorizing and the ayahs includes words which are quite difficult, so as I told you [we do not rely on peer tutoring in teaching scientific curriculums only, we also rely on it in teaching curriculums that require memorizing \[...\]](#). The student during the two lesson periods

managed to memorize three ayahs that she could not memorize in one whole week (*Academic aims*). During the whole week, she was not able to memorize during the whole week and was escaping from the teacher. She also went to another teacher saying ‘teacher, do not ask me in front of the girls in the class, my abilities are not good’, so when you promote her confidence by telling her that ‘it is okay if you practice Qur’an with your friend’ (*Reciting information*), and as you have a problem other people also have the same problem or other problems – we are not equal in our problems or in our advantages’, this can help the student a bit and make her realize that she is not alone. Although this age is very sensitive.

Q: Do you have guidelines for the implementation of the peer tutoring with SpLD students? Please explain.

No, we all rely on our own searches and our individual work, they introduce it for us in a loose way; the description of peer tutoring does not exceed one page in the teacher guide and it just says that peer tutoring is this, this and this. They presented videos of some implementations of peer tutoring in our training course, but they were all foreign. I always say to them that regrettably you give us foreign studies, give us studies from here: our reality is different, our learning environment is different, our numbers are different, our cultural environment is different, our societies are different. How can you bring us foreign studies and tell us to do the same thing in our classrooms?! It might have worked with those people, but only after they looked at their own situation and saw how peer tutoring could suit them. It is wrong to bring something from there and say it will work here (*Individual efforts*) (*Lack of guidelines for implementing peer tutoring*) (*Policy borrowing*). I should first try it out here. This is my fourth year as a teacher in middle school, and yes, thank God, each year I am becoming more

skilled in implementing a range of teaching strategies – including peer tutoring – but I still work in a very difficult environment. I am a teacher for students with learning difficulties, even though that isn't necessarily something I specialize in. As mainstream teachers we are restricted by the curriculum, by certain teaching methods, by the vast amount of work we have to do – but I still try to improve.

>>> So you are implementing peer tutoring based on your individual effort?

It is an individual effort and you will notice that when you observe me or other teachers you will that everyone has their own personal way of bringing this strategy into their classroom (*Individual efforts*). You might see something that one teacher does but other teachers do not. This does not mean that I am right or they are wrong, no – we are all right as long as we reach a good result. I am always saying to my colleagues that your work with your students is exactly like your relationships with your friends. You might be successful but when someone comes to you and says, “how do you do this thing?” you cannot explain to them how to do it in a way that works for them.

Q: How do you select students (tutors/ tutees) to take part in peer tutoring sessions? What criteria, if any, do you follow for the selection of students? Why?

I will tell you something: this [peer tutee selection process] relies heavily on the personality of the student with a learning difficulty, especially her acceptance of the idea that one of her friends will be her tutor, and on my opinion of whether I feel that she would benefit from it (*Personal characteristics*) (*Positive attitude*). For instance, some of them love this

idea and even prefer to work with their friends in their class if the lesson finishes early rather than coming to me [in the learning resources room], and some students have asked me if they can work elsewhere. I told them, “ok, I will allow Maha to help you in the classroom, but here is a worksheet to complete”. I do not doubt that they will work, but I want to see the results of Maha’s teaching, and I have actually seen good results, God bless them.

>>> Is the level of difficulty is something that you consider when implementing peer tutoring, because some teachers have told me that they do not use peer tutoring with students with severe learning difficulties?

No, the opposite! I have implemented peer tutoring with a student with severe learning difficulties, because she takes on board the lessons from her classmates, and she likes to gain the information from them more than me (*Level of difficulty*).

>>> How do you choose the student who will play the role of tutor?

I rely on some criteria which relate to the students themselves, such as their eagerness, generosity of spirit, and that she understands the lesson herself. They are excellent and smart girls and they do want to help. It also relies on the personality of the student with a learning difficulty; I ask her which student you love or you feel comfortable with. I do not much care that the tutor is excellent, I do not care. I tell my student that what matters to me is that you have to choose one who you feel personally comfortable with and whom you love to chat and talk with, because it is difficult to choose a student who is academic but unfriendly and ask her to teach her classmate. Then she will alienate her from the material (*Personal characteristics*) (*Positive attitude*) (*Excellence*).

Q: How do you prepare the students (tutors and tutees) for the peer tutoring sessions? What parameters do you cover in training students for the purpose of peer tutoring?

We start from here [*the learning resources rooms*]. I might give them a worksheet, they all work on it and I sometimes join them. I answer a question and one of the student answers another question and another student answers another one; I read a sentence and she reads a sentence and her colleague reads another one – so they start to learn that they work together. This idea is not something new for them, as they have already worked together in their classroom (*Practicing peer tutoring in advance*), such as when they come across discussion questions in their curriculums. They have also worked together when they come across the pairing strategy in the English curriculum: this strategy means that each student has to work with the person sitting next to her, not as a group, in order to answer a certain question. So the basics of the peer tutoring strategy already exist, giving students a background on how to implement this strategy, but the opportunities to make use of peer tutoring are not always available. One example of this is when I ask students with missing work, “why you did not write the information? Why you did not take the information from your friend’s book and write it down?” I have had responses that the classroom teacher did not give them time, therefore the implementation of peer tutoring relies on whether the classroom teachers provide the opportunity. It also relies on the other students in the classroom and whether they are well-behaved or not – sometimes two students are working together well while peer tutoring, and other students are laughing and chatting. This shows that classroom management is important for integrating peer tutoring as a learning strategy, in the sense that the classroom should not be noisy and not causing distractions.

>>> Is there criteria that you rely on when you train the students?

The tutor should be able to offer information kindly and the tutee should be able to understand and accept her tutor (*personal characteristics*) (*Positive attitude*).

Q: In which subjects/skills have you used peer tutoring to support students with SpLD?

Mathematics, science and religious subjects.

>>> Why you have chosen these subjects?

In religious subjects, we focus more on the Qur'an and on intonation, so dictation and repetition from the tutor really help (*Reciting information*).

Mainstream teachers also enforce peer tutoring by asking students to work in groups with one student in each group playing the role of tutor, but of course the number of students is quite large, so in practice, the classroom teacher asks each student tutor to listen to five peers reading from the Qur'an and record how many 'Ayahs' each student has recited. One of the issues with this is that the noise of so many students reciting can be distracting. In my classroom, I implement peer tutoring in Qur'an and Interpretation by focusing on particular words and 'ayahs', such as those which are difficult to understand. Peer tutoring can also help students catch up when they are falling behind: for example another teacher might say "we have reached the second 'Ayah' but Nora has still not recited the first section," so we bring the student together with her friend, or a classmate whom she loves, to listen to her and repeat with her. The student starts to listen to her reading and together they can read the Qur'an 'Ayah' by 'Ayah', repeating the 'Ayahs' together. The student tutor even helped her

friend by dividing the 'Ayahs' into smaller sections. The results were very noticeable, thank god. I have also implemented peer tutoring in Mathematics and Science because they are complex topics and because I am not as competent in these subjects (*Tackling problems related to teacher's lack of subject specific knowledge*).

Q: Can you describe the role of students (tutors/tutees) in peer tutoring sessions?

>>> Is it a reciprocal role?

No, I have not implemented it like this (*Unidirectional tutoring*).

>>> So is the role of tutor is to just to explain the lesson?

In my experience, it is true that some students just explain, explain and explain, but they also check students' understanding, and if her friend did not understand she explains again in a different way. The student tutors double check their peer's understanding, usually by asking a question and using the answer to assess progress. Each tutor has her way of checking students' understanding (*Playing the role of classroom teacher/more teacher-centered approach*) (*Providing practicing opportunities*) (*Checking students' understanding*).

Q: Can you describe your role before/during/after peer tutoring sessions? Can you give some examples? (Prompts: planning-pairing-training/observing-guiding-explaining- correcting/meeting-evaluating-providing feedback).

>>> Do you meet with your students during the term asking them for feedback?

Yes (*Evaluating peer tutoring program*).

>>> Do you meet with them at the end of the year?

Yes, because I notice that the progress of students can vary during the year –mainstream teachers notice as well, and tell me that, for example, a student's level might have gone up and then stagnated or regressed. My role here is to speak to the student, asking her about the reasons why she might not be doing as well and giving her some feedback (*Monitoring students' work*).

>>> So based on what you heard from the student, do you make any changes immediately or do you delay this to the next year?

We do not wait to the next year, we try to make changes in the same term and before the exams (*Amending peer tutoring program*).

2- Re-reading the transcript, reviewing and refining the codes and the highlighted text if necessary, for example the code (*Monitoring students' work*) was replaced by the code (*Supervision*).

3- Representing the codes under the pre-determined themes, as the following example:

Pre-determined Theme	Codes
Criteria for choosing peers	<i>Age criteria</i> <i>Common characteristics</i> <i>Personal characteristics</i> <i>Positive attitude</i> <i>Level of difficulty</i> <i>Excellence</i>

4- Re-analyzing the codes and grouping them into larger sub-themes according to the similarities and differences between the data, as in the following example:

Pre-determined Themes	Sub-themes	Codes
Criteria for choosing peers	Selection criteria for choosing peer tutors	<i>Excellence</i> <i>Personal characteristics</i>
	Selection criteria for choosing peer tutees	<i>Level of difficulty</i>
	Common criteria	<i>Age criteria</i> <i>Positive attitude</i> <i>Common characteristics</i>

*** Second Stage: Inductive Analysis**

1- Re-reading the transcript to analyse the remaining data which did not fit with any of the pre-determined themes.

2- Analyse the remaining data, either by identifying possible points of similarity or contrast between the data and the pre-determined themes, or by creating new emerging themes. For example, the theme “Limited holistic approach to SEN issues” was identified from the remaining data in the transcript below and then merged in the theme “Policy and guidelines”.

Q: Do you have guidelines for the implementation of the peer tutoring with SpLD students? Please explain.

No, we all rely on our own searches and our individual work, they introduce it for us loosely, but the description of PT does not exceed one page in the teacher guide: it just says that PT is this, this and this. They presented videos of some implementations of peer tutoring in the training course which we had, but they were all foreign and I always say to them that regrettably you give us foreign studies, give us studies from here: our reality is different, our learning environment is different, our numbers are different, our cultural environment is different, our societies are different. How can you bring us foreign studies and tell us to do the same thing in our classrooms?! It might have worked with those people, but only after they looked at their own situation and saw how peer tutoring could suit them. It is wrong to bring something from there and say it will work here (*Individual efforts*) (*Lack of guidelines for implementing peer tutoring*) (*Policy borrowing*). I should first try it out here. This is my fourth year as a teacher in middle school, and yes, thank God, each year I am becoming more skilled in implementing a range of teaching strategies – including peer tutoring – but I still work in a very

difficult environment. I am a teacher for students with learning difficulties, even though that isn't necessarily something I specialize in (*Limited holistic approach to SEN issues*). We as SEN teachers do not have a specific procedure to follow, not like mainstream teachers who are restricted by the curriculum and by certain teaching methods. My work is rather based on attempting to find the thing that I am skilled in and implement it.

*** Third Stage: Final analysis steps**

1- All the themes were re-analysed, re-grouped and refined, by establishing similarities and differences between the themes from the data gathered by other teachers, students and supervisors, as well as the data gathered from observations and document analysis.

2- The final themes were presented and discussed in accordance with those identified in the literature, and on the activity theory elements, in order to write a report.

Appendix 4: Example of Interview Transcript (Arabic)

Extracts from a teacher interview (S2ST6)

Dates and times: Thursday 4/02/2016 at 10 am (26 minutes)

Wednesday 17/02/2016 at 9 am (1 hour)

س1: مالذي تفهمينه من مصطلح التدريس بالأقران؟

يعني هو أقدر أقول انو تبادل معلومات بين فئتين عمرية متقاربة أو تبادل خبرات، حتى لو كان الطالب المعلم يعني أكبر من مرحلة التعلم الأكاديمي للمتعلم. يعني أهو بمصطلح عام أقدر أقول انو تبادل خبرات بين فئتين عمرية متقاربة.

س2: مالغرض من استراتيجية التدريس بالأقران؟

أنا ماشوف لها غرض أكاديمي بس، أنا أشوف لها أغراض كثيرة. يعني تلامس نفسية الإنسان بشكل عام بحكم أنه الطالب يتم تدريسه من قبل شخص قريب منه نفس الفئة العمرية، يعني نفس مثال الخصائص مشتركة. يعني مثلاً أنا دايم أقول لبناتي أشبهلهم انو مثلاً أنا مثلاً صديقتي ممكن أفهم منها المعلومة أكثر من لما يكون شخص بعيد عني، ممكن مثلاً أنا وأمي نتناقش بموضوع ما أفهمه من أمي زي ما أفهمه من أختي. يعني بحيث انو أنا مثلاً يمكن أمي تشرجلي إياه بطريقة وتكون شدة معي أو شي زي كذا فما أستوعب منها لكن لما تجيني أختي الكبيرة مثلاً كذا وكذا وأنتي أمي قصدها كذا أقدر أفهم الموضوع. عشان أبي اقرلهم الموضوع يعني انو يعني ممكن نفس الموضوع يفهم بطريقة أخرى من شخص فهمه لي بأسلوب ثاني يعني.

<< يعني تشوفين أن التعليم بالأقران ممكن يكون له غرض إجتماعي؟

له غرض إجتماعي ونفسي وعمرى. يعني أحسه يلمس الإنسان بأشياء وجوانب كثيرة، حتى أحياناً ناحية حتى فكرية بسبب تقاربهم في الفكر. يعني مثلاً أحياناً مثلاً لماتتناقشين بفكره مع أحد نتقبلينها من أحد ثاني لأن تحسين فكره وفكره متقارب، لكن لو أحد طرحها وأنتي يعني تأثير شخص على شخص بالرأي أعتبره من يعني مفهوم الأقران أو شي. أنا مثلاً مع خواتي يقولون لي مثلاً أنتي تأثيرك مثلاً على خالد أكثر مننا يمكن لانو قريبين من بعض، هذا أخوي الي تحتي على طول. إذا جينا نتناقش وبغوا شيء كذا يقولون أنتي قوليله. فأنا أحس انو يعني له له دور يعني لما نكون مشتركين بفكر واحد.

يعني أنا مثلا ما أقدر أجيب في مجال التعلم الاكاديمي ما أقدر أجيب اي طالبة أقول تعالي أشرحي لفلانه. أحتاج أول أجلس مع بنتي من تحبين من الفصل من تحسين وأنتي تسولفين معها ترتاحين وتنسطين. انو مو الهدف بس إنني إجيبيها وتشرحها وبس. مثلا يعني أنا عندي حاله من بداية السنة إلى الان أحاول أفنعه بالطريقه هذي مو متقبله، مو متقبله أن وحده من زميلاتنا تشرح لها.

س3: كيف تصفين دور استراتيجيه التدريس بالأقران في دعم الطالبات ذوات صعوبات التعلم؟

شوفي إستراتيجيه تدريس الإقران يعني من أروع الاستراتيجيات في عملية التعلم بشكل عام لاصعوبات التعلم ولا طالبات التعليم العام يعني إستراتيجيه إحسها يعني فعلا فعلا تطبيقها العملي بطريقة صحيحة مثري جدا مثري جدا لا للطالب ولا لل. يعني يمكن أنتي بعدين بتشوفين بنات عندي حتى البنات وهم يدرسون تحسين فيه اختلاف تشوفين شخصية وحده كأنها فعلا معلمة وطريقتها وإلقاء، وفيه إحد لا تحسبها كأنها تسولف مع زميلتها وكأنها توضحها. يعني حتى يطلعك شخصيات البنات يطلعك كيف تناقش وكيف تحاور، يمكن الي ماتقدر تناقشه مع معلمتها أو طرحه كأسئلة تناقشه مع زميلتها بمنتهى العفويه ويضحكون ويسولفون. تحسبها يعني فعلا عطاها العملية التعليمية بطريقة إجمال وأفضل وأبسط فكريا يعني شال حاجز انو فيه مثلا معلم وبيعطيني المعلومه وفيني أسأله وفيني ما أسأله خصوصا يعني مع الكثافه يعني ماشاء الله الطلابيه الي عندنا. احنا الفصل عندنا يوصل من 35 الى 40 والحصه 45 دقيقه وين بنعطي كل طالبة حقها، هذي من أكثر شي يعني يهلك حتى معلمات التعليم العام وماشاء الله الكثافه مو بالعدد الصفي بس لا عدد الفصول. يعني لو قلنا مثلا والله الفصل هذا والله 45 بس انو عندي مثلا فصلين ثالث أوكي بس أنا عندي 5 فصول ثالث يعني 5 فصول ثالث و 5 فصول اولي، إلهاق على معلمة التعليم العام ياالله تعطي الدرس وقولي 25 بالميه وعشان مانظلمها يعني 50 بالميه فهموا، فيبقى 50 بالميه مابين صعوبات مابين بطيئين ما بين ضعيفين انتباه ما بين قليلين تركيز ما بين أصلا يعني ياالله يعني تستدرجين إنتباههم عشان يركزون معك. فتبقى نسبه مهيب سهله احنا عندنا هنا المشكله مو كله صعوبات عندنا بطء تعلم عندنا إهمال عندنا كسل

بنسبة فظيعة وعندنا للأسف إنخفاض معدلات الدافعية للتعلم بطريقة مؤلمة في السنوات الأخيرة أنا
الاحظها من 4 سنوات الأخيرة بشكل يعني يالملك أن البنات مافيه أي دافعية للتعلم.

س4: ماذجة أهمية تطبيق استراتيجية التدريس بالأقران لدعم الطالبات ذوات صعوبات التعلم؟
ولماذا؟

(1 = مهمه جداً، 2 = مهمه، 3 = محايدة، 4 = ليست مهمه بشكل كبير، 5 = ليست مهمه إطلاقاً)

1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐

أنا أعتبر التدريس بالأقران مهمه جدا جدا. أنا اللحين مثلا بناتي عندي في البيت مع انو فرق العمر
بينهم شوي كبير يعني مريم عمرها 5 سنوات ونص وسها عمرها 10 سنوات يعني 5 سنوات ونص
بينهم تقريبا يعني أعمارهم كبيرة مختلفة يعني مو سنه تقولين هذي على طول هذي 9 وهذي 10
يعين مابينهم شي. بس ماتتخيلين وشلون مريم الصغيره تتأثر بسها يعني لو أنه شي كبير عليها طيب
ياماما هذي في رابع وانتني لسه دخلتي اولي يعني شوي. حتى إذا عطيتها لبس وهذا يلا البسي مريم
تقول لا ما أبغاه بلبس الثاني أروح أقول لسها ماما روعي اقنعها اقنعها تلبس هذا ،،، وإذا صار
اللبس الي بتلبسه مريم مو زي حق سها لا أبغى زي حق سها يعني شوفي كيف فمابالك لو هم أقرب
بالعمر كان بيكون التأثير مروره.

س5: كم مره تستخدمين استراتيجية التدريس بالأقران بالمقارنه مع طرق استراتيجيات التدريس
الأخرى؟ ولماذا؟

هو مو يومي يومي أقدر أقول أسبوعي، بس مو أسبوعي، مره في الأسبوع، لا مرتين في الأسبوع.
لأن الاستراتيجيات الثانيه خلاص أنا دربت البنات عليها فالبنات هي بنفسها تبين لي تمكنها عليها أو
عدم تمكنها، لكن الأقران أنا ألاحظ في نفس الحصة نتائجها يعني أنا أشوفها على بنتي يعني أنا مثلا

لما أجيبهم أنا هنا أو لما البنت تعطي زميلتها الدرس تجيلي ورقة عمل طبقتها أشوف نتائج وأشوف ملاحظات المعلمة الصغيرة ترى حلتها بمساعدتي ترى حلتها لوحدها يعني أنا ألاحظ هالشي، لكن لما أنا أقولها مثلا العصف الذهني أو خرائط المفاهيم أو تدوين المعلومات كلها يعني صح أنها استراتيجيات حلوه بس تطبيقها مو بسهولة هذي. تدريس الأقران أسهل ليه لأن دائما الإنسان لما يأخذ المعلومة من شخص مثله أو في نفس فئته العمريه يكون أسهل عليه من لما هو يحاول يستخرج المعلومة بنفسه.

<< إذا هل تطبيق استراتيجيه تدريس الاقران اسهل بالنسبه لكل كمعلمه مقارنة مع الاستراتيجيات

الثانيه؟

ماهي بالسهره الي مره لانو نجاحها يعتمد على تفعيلها الصح. يعني ماهو نجاحها يعني الاستراتيجيات الثانيه الي احنا نطبقها مثلا تدوين المعلومات أو الملاحظات أو خرائط المفاهيم ماهيب سهله أبدا بالعكس صعبه لأنها تعتمد على أن البنت تتمكن مره وري مره كيف تلخص المعلومه بطريقه أفضل وتستخرج المعلومات المناسبه للرسم الهرمي هذا فهي شوي صعبه يعني ممكن البنت تعرف تلخص المعلومات بس ماتعرف تقسمها التقسيمات الصحيحه فيصير فيه خلط بالمعلومات. أحيانا احنا وش نسوي عشان البنت شوي تنجح في الطريقه يصير احنا نرسم الرسم البياني فأنتي وزعي المعلومات يكون شوي حتى هذي ممكن تجد فيها صعوبه البنت، فتصير البنت تجي توزع المعلومات تعتمد على ذاكره بصرية وذاكره سمعيه انو البنت حفظت حفظت وتذكر مكان المعلومه وين فيه، بس برضو احنا الذاكره عندنا عند بنات قصيرة فمجرد أنها سكرت الكتاب ممكن تنسى المعلومه. يعني أمس أخذنا درس وكان تدريب أقران حصتين كامله على تسميع 3 آيات قرآن تسميع 3 آيات قرآن بس. البنت عندها صعوبة في النطق شوي وعندها صعوبة في الحفظ والآيات شوي فيها كلمات شوي صعبه أقولك هو مايعتمد على المواد العلمية بس حتى مواد التلقين العادية جدا مفيده فيها والبنت في الحصتين هذي قدرت تحفظ الي ما قدرت تحفظه بأسبوع كامل. أسبوع كامل كانت ماهي قادره تحفظه في البنت وتتهرب من المعلمة وكانت تقول لمعلمة ثانية أن استاذة لاتسأليني قدام البنات أنا قدراتي ماهي

كوبسه. فهو يعني لما أنتي تعززين ثقتها بنفسها انو مافيها شي أنتي وصديقتك تقرين وأنتي عندك مشكله وغيرك عنده نفس المشكله أو مشكله ثانيه واحنا محنا متساوين بمشكلاتنا ولا بمحاسننا يعني يتحسنون شوي ويستوعبون، مع أن العمر هذا جدا حساس جدا حساس.